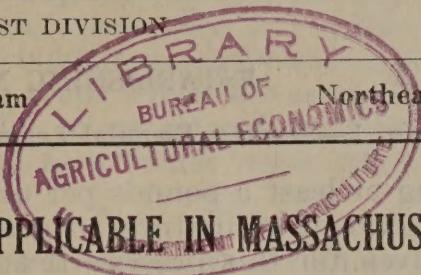


142
236
CP 10
1938

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL ADJUSTMENT ADMINISTRATION
NORTHEAST DIVISION

1938 Agricultural Conservation Program



SOIL-BUILDING PRACTICES APPLICABLE IN MASSACHUSETTS

	Page
ESTABLISHING NEW SEEDINGS:	
Practice No. 1. SEEDING BIENNIAL LEGUMES-----	2
Practice No. 2. SEEDING ALFALFA-----	2
Practice No. 3. SEEDING PASTURE-----	2
Practice No. 4. RESEEDING DEPLETED PASTURES-----	2
GREEN MANURE AND COVER CROPS:	
Practice No. 5. GREEN MANURE-----	2
Practice No. 6. SEEDING WINTER LEGUMES-----	3
FARM WOODLAND IMPROVEMENT:	
Practice No. 7. IMPROVING WOODLANDS-----	3
Practice No. 8. PLANTING FOREST TREES-----	3
Practice No. 9. EXCLUDING LIVESTOCK FROM FARM WOODLAND-----	3
SANDING CRANBERRY BOGS:	
Practice No. 10. SANDING CRANBERRY BOGS-----	4
APPLYING FERTILIZERS AND LIME:	
Practice No. 11. APPLYING AVAILABLE PHOSPHORIC ACID-----	4
Practice No. 12. APPLYING AVAILABLE POTASH-----	4
Practice No. 13. LIMING CROP AND PASTURE LAND-----	5
MULCHING:	
Practice No. 14. MULCHING ORCHARD OR VEGETABLE LAND-----	5
SOIL-DEPLETING CROPS -----	
	5

The following are soil-building practices which are applicable to and approved for the State of Massachusetts. For each practice carried out as specified herein on any farm, credit at the rate indicated in the description of the practice below will be given toward achieving the soil-building goal established for the farm under the 1938 Agricultural Conservation Program.

Practices carried out with labor, seed, trees, or materials furnished entirely by any State or Federal agency other than the Agricultural Adjustment Administration shall not be counted toward meeting the soil-building goal. If a portion of the labor, seed, trees, or materials used in carrying out any practice is furnished by a State or Federal agency other than the Agricultural Adjustment Administration, that

portion of the total acreage of the practice commensurate with that portion of the total cost not furnished by the State or Federal agency may be counted toward meeting the soil-building goal.

ESTABLISHING NEW SEEDINGS

Practice No. 1.—Seeding Biennial Legumes: *Rate of Credit, 1 Unit per Acre*

Seeding at least 5 pounds per acre of adapted medium red clover or its equivalent in mixtures of grasses or other clovers. Credit will not be given for this practice if such seedings are plowed or disked under for green manure in 1938.

The following shall be considered the equivalent of 5 pounds of red clover:

8 pounds of white sweet clover.	4 pounds of alsike clover.
2 pounds of white Dutch clover.	2 pounds of ladino clover.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that enough lime and fertilizer were applied to ordinarily establish a good stand.

Practice No. 2.—Seeding Alfalfa: *Rate of Credit, 2 Units per Acre*

Sowing (1) at least 10 pounds of hardy, northern-grown domestic or Canadian alfalfa seed per acre or (2) mixtures containing at least 10 pounds per acre of such seed.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that enough lime and fertilizer were applied to ordinarily establish a good stand.

Practice No. 3.—Seeding Pasture: *Rate of Credit, 2 Units per Acre*

Sowing a pasture mixture containing at least 5 pounds per acre of biennial or perennial legumes and at least 5 pounds per acre of perennial grasses other than timothy or redtop.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that enough lime and fertilizer were applied to ordinarily establish a good stand.

Practice No. 4.—Reseeding Depleted Pastures: *Rate of Credit, 1 Unit per Each 10 Pounds of Seed but Not in Excess of 1 Unit per Acre*

Applying to depleted pastures a pasture mixture containing at least one-third ladino or white Dutch clover seed and at least one-third perennial grass seed other than timothy or redtop. No tillage is required.

GREEN MANURE AND COVER CROPS

Practice No. 5.—Green Manure: *Rate of Credit, 1 Unit per Acre*

Plowing or disk ing under a good stand and a good growth of (1) biennial or perennial legumes or grasses, for which no credit for seeding is given in 1938 and from which no crop of such legumes or grasses has been harvested, (2) annual legumes, (3) annual grasses,

or (4) small grains. If the crop is one which is normally winter-killed, credit will be given for leaving a good stand and a good growth on the land instead of plowing or disking it under.

It is not generally good farm practice to plow down green-manure crops if it will result in leaving the land unprotected during the winter. It is recommended, therefore, that crops which are normally winter-killed and which otherwise might be considered as green-manure crops for 1938, be left on the land as a winter cover wherever it is possible.

Practice No. 6.—Seeding Winter Legumes: *Rate of Credit, 1 Unit per Acre*

Seeding and leaving a good growth of winter vetch on the land as a winter cover crop.

FARM WOODLAND IMPROVEMENT

Practice No. 7.—Improving Woodlands: *Rate of Credit, 2 Units per Acre*

Improving the stand of forest trees by thinning, weeding, or pruning to develop at least 100 potential timber trees of desirable species, well distributed over each acre of woodland.

Operators shall obtain prior approval from the county committee and carry out the practice in accordance with the advice of the Extension forester.

The following are recommended as desirable species for development:

Red pine.	Fir (any kind).	Tulip poplar.	White ash.
White pine.	Sugar maple.	White birch.	Red oak.
Spruce (any kind).	White maple.	Yellow birch.	White oak.
Black cherry.	Red maple.	Black birch.	Basswood.
Cedar.	Hemlock.	Beech.	Hickory.
			Elm.

Practice No. 8.—Planting Forest Trees: *Rate of Credit, 5 Units per Acre*

Planting transplanted forest trees at the rate of at least 1,000 trees per acre spaced about 6 by 6 feet.

Species of trees approved for planting are: Red pine, white pine, Balsam fir, red spruce, white spruce, and Norway spruce. Other varieties may be planted if the county committee, upon advice of the Extension forester, approves the selection.

Practice No. 9.—Excluding Livestock From Farm Woodland: *Rate of Credit, $\frac{1}{4}$ Unit per Acre*

Restoring farm woodland previously used for pasture by excluding livestock.

Credit will be allowed for each acre of maple-sugar orchard from which livestock are excluded. To be classified as a maple-sugar orchard, the land must have at least 8 maple-sugar trees per acre suitable to be tapped. These trees must make up at least one-fourth of the trees on the land.

Credit will also be allowed for each acre of other farm woodland from which livestock are excluded, but not in excess of 2 acres for each animal unit¹ which is normally allowed to graze in the woodland.

The operator must obtain approval of the county committee before performing this practice.

SANDING CRANBERRY BOGS

Practice No. 10.—Sanding Cranberry Bogs: Rate of Credit, 5 Units per Acre

Applying sand, free from stones or loam, to a depth of at least $\frac{1}{2}$ inch on fruiting cranberry bogs to prevent soil deterioration and decline in the productive capacity of the land.

The county committee will require evidence as to the number of cubic yards of sand applied per acre.

APPLYING FERTILIZERS AND LIME

Practice No. 11.—Applying Available Phosphoric Acid: Rate of Credit, 1 Unit per Each 48 Pounds

Applying available phosphoric acid to or in connection with the seeding of perennial or biennial legumes, perennial grasses, winter legumes, or permanent pastures.

	<i>Pounds per acre</i>
Largest application as top dressing for credit-----	48
Largest application in connection with seeding for credit-----	144

Phosphoric acid used under the program may be first incorporated as superphosphate into stable manure and used on dropping boards in poultry houses. Superphosphate should be used at the rate of about 1 pound per cow per day and about 30 pounds per 100 hens per month. When used with manure, credit will be given for the phosphoric acid only if the manure is applied to perennial or biennial legumes, perennial grasses, winter legumes, or permanent pasture.

When phosphoric acid is used on a nurse crop which is harvested for grain, 32 pounds per acre will be deducted.

Practice No. 12.—Applying Available Potash: Rate of Credit, 1 Unit per Each 100 Pounds

Applying available potash (K_2O) to or in connection with the seeding of perennial or biennial legumes, perennial grasses, winter legumes, or permanent pastures.

	<i>Pounds per acre</i>
Largest application as grassland top dressing for credit-----	50
Largest application as legume top dressing for credit-----	100
Largest application with new alfalfa or clover seedings for credit-----	300

¹ Animal unit means 1 cow, 1 horse, 5 sheep, 5 goats, 2 calves, or 2 colts, or the equivalent thereof.

Practice No. 13.—Liming Crop and Pasture Land: Rate of Credit:

Area A.—All counties except Berkshire:

1 unit for each (1) 800 pounds of standard ground limestone or standard ground oyster shell or (2) 600 pounds of hydrated lime.

1 unit for each 400 pounds of total calcium and magnesium oxides in other ground limestone and ground oyster shell which will pass through a 20-mesh sieve.

Area B.—Berkshire County:

1 unit for each (1) 1,000 pounds of standard ground limestone or standard ground oyster shell or (2) 750 pounds of hydrated lime.

1 unit for each 500 pounds of total calcium and magnesium oxides in other ground limestone and ground oyster shell which will pass through a 20-mesh sieve.

Applying not less than 1,000 pounds and not more than 6,000 pounds of standard ground limestone or its equivalent per acre to crop or pasture land.

Standard ground limestone and standard ground oyster shell are limestone and oyster shell, respectively, which will analyze at least 50 percent total magnesium and calcium oxides, 100 percent of which will pass through a 20-mesh sieve and at least 60 percent of which will pass through a 100-mesh sieve.

The equivalent of 1,000 pounds of standard ground limestone is 750 pounds of hydrated lime.

The following table gives the smallest and largest amounts of ground limestone or ground oyster shell of different degrees of fineness which can be applied per acre for credit:

Percentage of material which will pass through a 100-mesh sieve	Smallest number of pounds of material per acre	Largest number of pounds of material per acre
60 and over	1,000	6,000
50 to 60	1,250	7,500
40 to 50	1,500	9,000
30 to 40	2,000	12,000
20 to 30	2,500	15,000
10 to 20	3,000	18,000

Equivalent quantities of other liming material approved by the State committee may be used.

MULCHING ORCHARD OR VEGETABLE LAND

Practice No. 14.—Mulching Orchard or Vegetable Land: Rate of Credit, 1 Unit per Ton

Applying not less than 2 tons and not more than 5 tons per acre of air-dried straw or its equivalent, or hay, to orchard or vegetable land as a mulch if all materials produced on the land during 1938 from grasses, legumes, green-manure crops, or cover crops are left on the land.

SOIL-DEPLETING CROPS

Land devoted in 1938 to any of the following crops² or uses, or such other similar crops and uses as are designated by the Agricultural Adjustment Administration, shall be classified as soil-depleting:

² Volunteer crops, if harvested, shall classify as if planted.

(a) Land planted to any of the following crops for harvest in 1938:

- (1) Corn (including field corn and popcorn, but excluding sown or close-drilled corn used as a cover crop or green-manure crop).
- (2) Grain sorghums.
- (3) Tobacco.
- (4) Mangels and cowbeets.
- (5) Cultivated sunflowers.
- (6) Truck and vegetable crops (including strawberries, melons, sweet corn, and sweetpotatoes) and their seeds.
- (7) Potatoes.
- (8) Bulbs and flowers.
- (9) Field beans.
- (10) Canning peas.

(b) Land from which any of the following crops is harvested for silage, hay, grain, or seed in 1938:

- | | |
|----------------|---------------------------------|
| (1) Wheat. | (7) Sudan grass. |
| (2) Oats. | (8) Millet. |
| (3) Barley. | (9) Sown or close-drilled corn. |
| (4) Rye. | (10) Soybeans. |
| (5) Buckwheat. | (11) Cowpeas. |
| (6) Rape. | (12) Field peas. |

The acreage of land which is devoted consecutively to two or more of the above soil-depleting crops in 1938 shall be counted as follows:

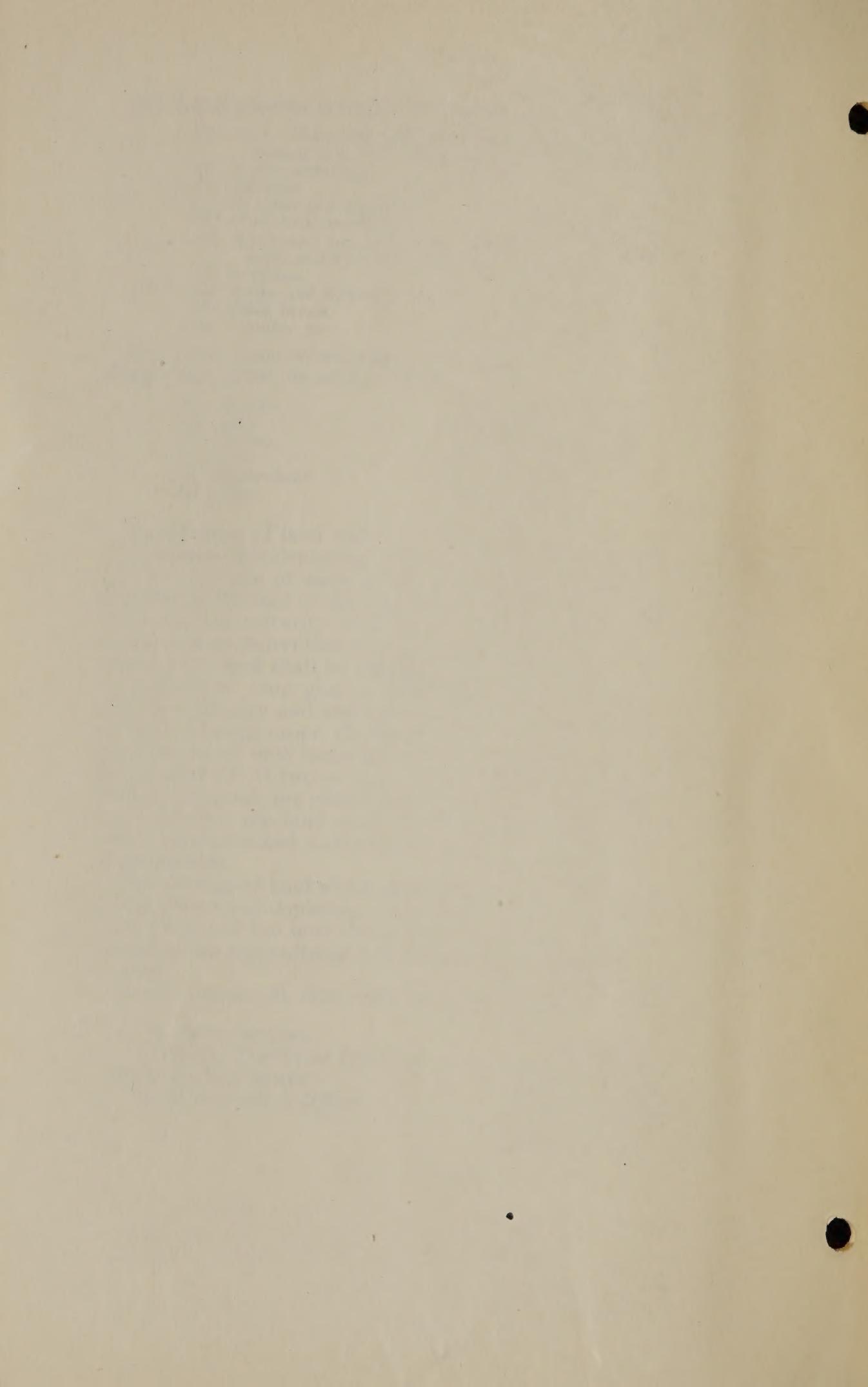
(1) If only one of such crops reaches maturity such land shall be regarded as devoted to the crop reaching maturity; (2) if none of such crops reaches maturity or if more than one of such crops reach maturity and an individual crop goal is established for only one of such crops, such land shall be regarded as devoted to the crop for which an individual crop goal is established; (3) if none of such crops reaches maturity and individual crop goals are established for two or more of such crops, the land shall be regarded as devoted to the last planted of such crops for which an individual crop goal is established; and (4) if two or more of such crops reach maturity and individual crop goals are established for two or more of such crops reaching maturity, the land shall be regarded as devoted to each of the crops which reached maturity and for which an individual crop goal is established.

The acreage of land which is devoted simultaneously to two or more of the above soil-depleting crops shall be divided among such crops on the basis of the land determined, in accordance with instructions issued by the Agricultural Adjustment Administration, to be occupied by each.

Issued January 6, 1938, with the approval of the Administrator.

A. W. MANCHESTER,
Director, Northeast Division.
SUMNER R. PARKER,
State Executive Officer.

CHARLIE B. JORDAN,
SHAUN KELLY,
THEOREN L. WARNER,
ALDEN R. WHEELER,
HAROLD F. THOMPSON,
State Committee.



MAR
1938
N 16 711

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL ADJUSTMENT ADMINISTRATION
NORTHEAST DIVISION

1938 Agricultural Conservation Program

Northeast Region

SOIL-BUILDING PRACTICES APPLICABLE IN MAINE

	Page
ESTABLISHING NEW SEEDINGS:	
Practice No. 1. SEEDING BIENNIAL LEGUMES-----	2
Practice No. 2. SEEDING ALFALFA-----	2
Practice No. 3. SEEDING PERMANENT PASTURE-----	2
Practice No. 4. RESEEDING DEPLETED PASTURES-----	2
Practice No. 5. SEEDING TIMOTHY AND REDTOP-----	2
APPLYING FERTILIZERS AND LIME:	
Practice No. 6. APPLYING AVAILABLE PHOSPHORIC ACID-----	8
Practice No. 7. APPLYING AVAILABLE POTASH-----	8
Practice No. 8. LIMING-----	8
GREEN MANURE OR COVER CROPS:	
Practice No. 9. GREEN MANURE-----	4
SOIL-EROSION CONTROL:	
Practice No. 10. STRIPCROPPING-----	4
Practice No. 11. CONTOUR CULTIVATION-----	5
MULCHING:	
Practice No. 12. MULCHING ORCHARDS OR VEGETABLE LAND-----	5
FARM WOODLAND IMPROVEMENT:	
Practice No. 13. IMPROVING WOODLANDS-----	5
Practice No. 14. EXCLUDING LIVESTOCK FROM FARM WOODLAND-----	5
Practice No. 15. PLANTING FOREST TREES-----	6
SOIL-DEPLETING CROPS	6

The following are soil-building practices which are applicable to and approved for the State of Maine. For each practice carried out as specified herein on any farm, credit at the rate indicated in the description of the practice will be given toward achieving the soil-building goal established for the farm under the 1938 Agricultural Conservation Program.

Practices carried out with labor, seed, trees, or materials furnished entirely by any State or Federal agency other than the Agricultural Adjustment Administration shall not be counted toward meeting the soil-building goal. If a portion of the labor, seed, trees, or materials used in carrying out any practice is furnished by a State or Federal agency other than the Agricultural Adjustment Administration, that portion of the total acreage of the practice commensurate with that portion of the total cost not furnished by the State or Federal agency may be counted toward meeting the soil-building goal.

ESTABLISHING NEW SEEDINGS

Practice No. 1.—Seeding Biennial Legumes: *Rate of Credit, 1 Unit per Acre*

Seeding biennial legumes or mixtures of timothy or redtop and legumes. When medium red clover is used, it must be hardy, northern-grown. Credit will not be given for this practice if such seedings are plowed or disked under for green manure in 1938.

If the stand is unsatisfactory, the farmer must submit to his county committee a soil test which conforms with the regulations of the State committee or other evidence that enough lime, fertilizer, and seed were used ordinarily to assure a good stand.

Practice No. 2.—Seeding Alfalfa: *Rate of Credit, 2 Units per Acre*

Sowing at least 15 pounds of hardy, adapted, northern-grown domestic or Canadian alfalfa seed per acre on land properly drained. Credit will not be given for this practice if such seedings are plowed or disked under for green manure in 1938.

If the stand is unsatisfactory, the farmer must submit to his county committee a soil test which conforms with the regulations of the State committee or other evidence that enough lime, fertilizer, and seed were used ordinarily to assure a good stand.

Practice No. 3.—Seeding Permanent Pasture: *Rate of Credit, 2 Units per Acre*

Sowing a permanent pasture mixture containing at least 20 pounds of seed per acre, of which at least 6 pounds is hardy, northern-grown medium red or other red clover, 2 pounds ladino clover, and 6 pounds perennial grasses other than timothy and redtop. Credit will not be given for this practice if such seedings are plowed or disked under for green manure in 1938.

If the stand is unsatisfactory, the farmer must submit to his county committee a soil test which conforms with the regulations of the State committee or other evidence that enough lime, fertilizer, and seed were used ordinarily to assure a good stand.

Practice No 4.—Reseeding Depleted Pastures: *Rate of Credit, 1 Unit per Each 10 Pounds of Seed but not in Excess of 1 Unit per Acre So Seeded*

Reseeding depleted established pastures with good seed of adapted pasture grasses or grasses and legumes.

If the stand is unsatisfactory, the farmer must submit to his county committee a soil test which conforms with the regulations of the State committee or other evidence that enough lime, fertilizer, and seed were used ordinarily to assure a good stand.

Practice No. 5.—Seeding Timothy and Redtop: *Rate of Credit, $\frac{1}{2}$ Unit per Acre*

Seeding timothy or mixtures of timothy and redtop.

If the stand is unsatisfactory, the farmer must submit to his county committee a soil test which conforms with the regulations of the State committee or other evidence that enough lime, fertilizer, and seed were used ordinarily to assure a good stand.

APPLYING FERTILIZERS AND LIME

Practice No. 6.—Applying Available Phosphoric Acid: *Rate of Credit, 1 Unit per Each 48 Pounds*

Applying available phosphoric acid in connection with the seeding of biennial or perennial legumes, perennial grasses, winter legumes, or permanent pastures; or on orchard, pasture, or hayland sod.

On livestock farms, at least 25 percent of the phosphoric acid used under the program should be incorporated in manure prior to storage or in the gutter when manure is hauled directly to the field. Credit will be given for the phosphoric acid used with manure only if the manure is applied to or in connection with the seeding of biennial or perennial legumes, perennial grasses, winter legumes, or permanent pastures.

Smallest application for credit	32 pounds per acre
Largest application for credit	128 pounds per acre

When phosphoric acid is used on a nurse crop which is harvested for grain, 32 pounds per acre will be deducted.

Practice No. 7.—Applying Available Potash: *Rate of Credit, 1 Unit per Each 100 Pounds*

Applying available potash in connection with the seeding of biennial or perennial legumes, perennial grasses, winter legumes, or permanent pastures; or on orchard, pasture, or hayland sod.

Smallest application for credit	20 pounds per acre
Largest application for credit	100 pounds per acre

Practice No. 8.—Liming: *Rate of Credit*,

Pulverized or Ground Limestone: 1 unit for each 400 pounds of calcium oxide neutralizing equivalents which will pass through a 20-mesh sieve.

Hydrated Lime, Quicklime, or Wood Ashes: 1 unit for each 400 pounds of calcium oxide neutralizing equivalents.

Field Dug Marl: 1 unit for each 1,500 pounds of marl.

(1) Applying not more than 5,000 pounds per acre of standard pulverized limestone or its equivalent in neutralizing value to pasture land or cropland which is not used for the production of potatoes.

(2) Applying not more than 1,000 pounds per acre of standard pulverized limestone or its equivalent to potato land in preparation for seeding legumes or grasses.

(3) Applying before July 15, 1938, not more than 1,000 pounds per acre of standard pulverized limestone or its equivalent to land which is not to be devoted to potatoes in 1938.

Credit will not be given for the application of lime to land which is to be devoted to the production of potatoes in 1938.

Standard pulverized limestone is limestone which analyzes 50 percent calcium oxide neutralizing equivalents, 100 percent of which will pass through a 20-mesh sieve and at least 60 percent of which will pass through a 100-mesh sieve.

The following table gives the largest amounts of pulverized limestone of different degrees of fineness which can be applied per acre for credit:

Percentage of material which will pass through a 100-mesh sieve	Largest number of pounds of material per acre of potato land	Largest number of pounds of material per acre of other land
60 and over-----	1,000	5,000
50 to 60-----	1,250	6,250
40 to 50-----	1,500	7,500
30 to 40-----	2,000	10,000
20 to 30-----	2,500	12,500
10 to 20-----	3,000	15,000

One hundred pounds of magnesium oxide is equivalent in neutralizing value to 140 pounds of calcium oxide.

RECOMMENDED LIMING MATERIALS: Quicklime, hydrated lime, pulverized or ground limestone, marl, wood ashes, or other material approved by the State committee.

GREEN MANURE OR COVER CROPS

Practice No. 9.—Green Manure: *Rate of Credit, 1 Unit per Acre*

Plowing or disking under a good stand and a good growth of (1) biennial or perennial legumes or grasses, for which no credit for seeding is given in 1938 and from which no crop of such legumes or grasses has been harvested; (2) annual legumes; (3) annual grasses; or (4) small grains. If the crop is one which is normally winter-killed, credit will be given for leaving a good stand and a good growth on the land instead of plowing or disking it under.

If, on land normally devoted to the production of potatoes, the first crop of second-year clover is cut and left on the land and the second crop is plowed or disked under after August 15, 1938, credit will be given for the use of both the first and second crops as a green manure crop.

The following minimum rates of seeding per acre are recommended when the following crops are to be used alone as green manure:

Crop:	Amount	Crop—Continued.	Amount
Soybeans----- (lbs.)	60	Rye ----- (bu.)	1½
Red clover (mammoth or me- dium)----- (lbs.)	10	Corn ----- (lbs.)	30
Vetch ----- (lbs.)	50	Barley ----- (bu.)	2
Field peas----- (lbs.)	90	Millet ----- (lbs.)	30
Crimson clover ----- (lbs.)	20	Oats ----- (bu.)	2½
		Buckwheat ----- (lbs.)	72

SOIL EROSION CONTROL

Practice No. 10.—Stripcropping: *Rate of Credit, ¼ Unit per Acre*

Planting cropland, having a general slope of over 5 percent, in strips, on the contour. Strips of intertilled crops must be separated by strips of close-growing crops.

Operators must obtain the approval of the county committee and instructions from the Soil Conservation Service or the Extension Service before performing this practice.

Practice No. 11.—Contour Cultivation: *Rate of Credit, $\frac{1}{6}$ Unit per Acre*

Farming intertilled crops on the contour.

Operators must obtain the approval of the county committee and instructions from the Soil Conservation Service or the Extension Service before performing this practice.

MULCHING

Practice No. 12.—Mulching Orchards or Vegetable Land: *Rate of Credit, 1 Unit per Ton*

Applying to orchards or vegetable land not less than 1 ton and not more than 5 tons of mulching material per acre in addition to leaving on the land all materials produced thereon during 1938 from grasses, legumes, green manure, or cover crops.

RECOMMENDED MULCHING MATERIALS

	<i>Percentage of weight for credit</i>
1. Air-dried straw	100
2. Air-dried tame or marsh hay	100
3. Green tame or marsh hay	50
4. Air-dried peat	100
5. Wet peat	50
6. Seaweed (dry)	100
7. Seaweed (wet)	25
8. Poultry litter (dry)	100
9. Poultry litter (wet)	50
10. Bedding material, small amount of manure	50
11. Pea waste (wet)	50
12. Other materials approved by the State committee.	

FARM WOODLAND IMPROVEMENT

Practice No. 13.—Improving Woodlands: *Rate of Credit, 2 Units per Acre*

With prior approval of the county committee, improving the stand of forest trees by thinning, weeding, or pruning to develop at least 100 potential timber trees of desirable species well distributed over each acre of woodland.

Credit will not be given for weeding and thinning on the same area.

If pruning is one of the practices used, it shall be confined to pine not over 8 inches in diameter and must be done with a saw or pruning shears after the area has been properly thinned.

Practice No. 14.—Excluding Livestock from Farm Woodland: *Rate of Credit, $\frac{1}{4}$ Unit per Acre*

Restoring farm woodland previously used for pasture by excluding livestock.

Credit will be allowed for each acre of maple-sugar orchard from which livestock are excluded. To be classified as a maple-sugar orchard, the land must have at least 8 maple-sugar trees per acre suitable to be tapped. These trees must make up at least one-fourth of the trees on the land.

Credit will also be allowed for each acre of other farm woodland from which livestock are excluded, but not in excess of two acres for each animal unit¹ which is normally allowed to graze in the woodland.

The operator must obtain approval of the county committee before performing this practice.

Practice No 15.—Planting Forest Trees: *Rate of Credit, 5 Units per Acre*

Planting transplanted forest trees of approved species at the rate of at least 1,000 trees per acre, spaced about 6 by 6 feet. Species recommended for planting are: White pine, when currant and gooseberry bushes have been cleaned out of the area; red (Norway) pine; red spruce; Norway spruce; Scotch pine in mixed planting; and hybrid poplars. Other species must be approved by the State committee.

SOIL-DEPLETING CROPS

Land devoted in 1938 to any of the following crops² or uses, or such other similar crops and uses as are designated by the Agricultural Adjustment Administration, shall be classified as soil-depleting:

- (a) Land planted to any of the following crops for harvest in 1938:
 - (1) Corn (including field corn and popcorn, but excluding sown or close-drilled corn used as a cover crop or green-manure crop)
 - (2) Grain sorghums
 - (3) Mangels and cowbeets
 - (4) Cultivated sunflowers
 - (5) Truck and vegetable crops (including strawberries, melons, sweet corn, and sweetpotatoes) and their seeds
 - (6) Potatoes
 - (7) Bulbs and flowers
 - (8) Field beans
 - (9) Canning peas
- (b) Land from which any of the following crops is harvested for silage, hay, grain, or seed in 1938:
 - (1) Wheat
 - (2) Oats
 - (3) Barley
 - (4) Rye
 - (5) Buckwheat
 - (6) Rape
 - (7) Sudan grass
 - (8) Millet
 - (9) Sown or close-drilled corn
 - (10) Soybeans
 - (11) Cowpeas
 - (12) Field peas

¹ Animal unit means 1 cow, 1 horse, 5 sheep, 5 goats, 2 calves, or 2 colts, or the equivalent thereof.

² Volunteer crops, if harvested, shall classify as if planted.

The acreage of land which is devoted consecutively to two or more soil-depleting crops in 1938 shall be counted as follows: (1) If only one of such crops reaches maturity such land shall be regarded as devoted to the crop reaching maturity. (2) If none of such crops reaches maturity or if more than one of such crops reach maturity and one of the crops reaching maturity is potatoes, such land shall be regarded as devoted to potatoes.

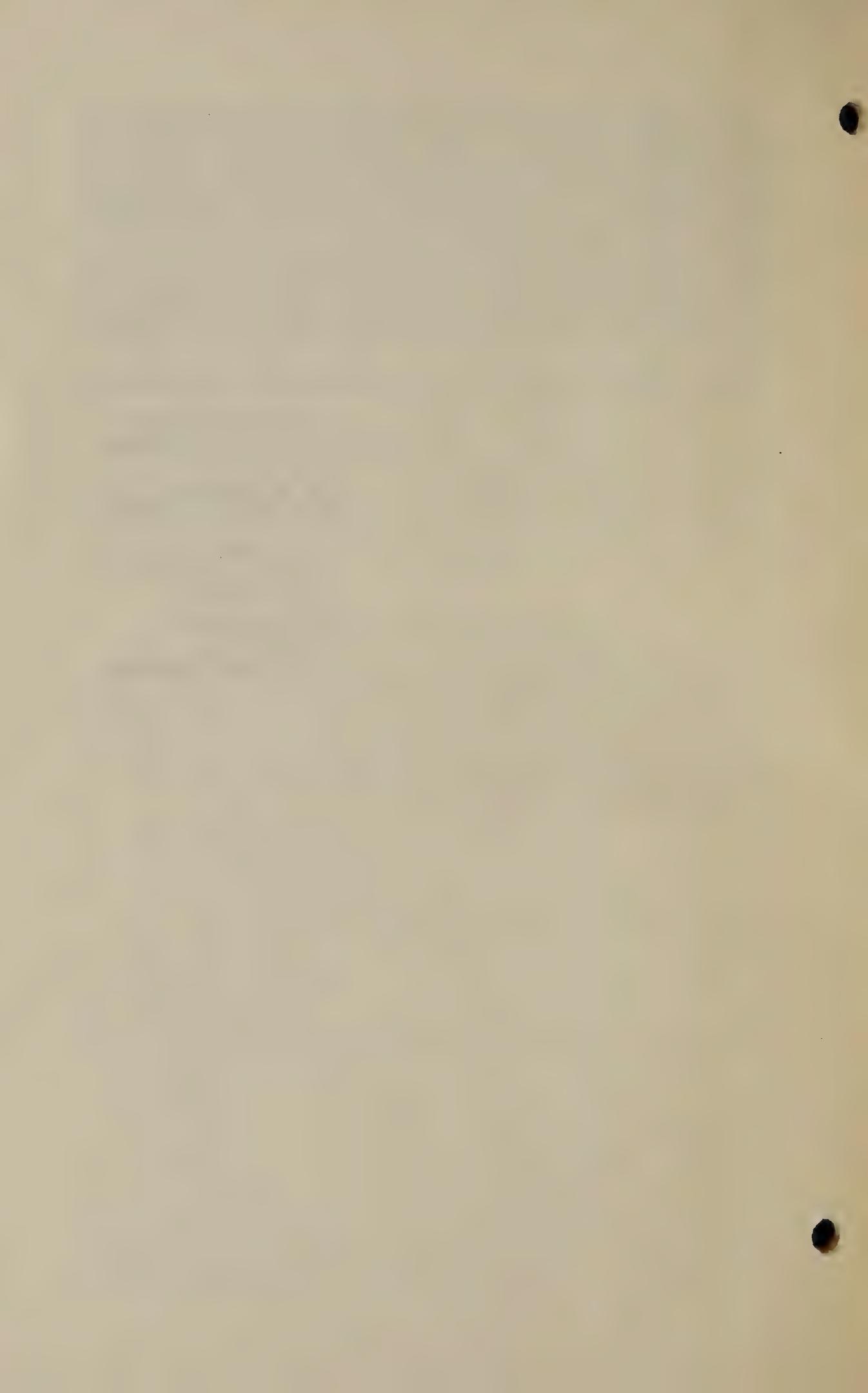
The acreage of land which is devoted simultaneously to two or more soil-depleting crops shall be divided among such crops on the basis of the land determined, in accordance with instructions issued by the Agricultural Adjustment Administration, to be occupied by each.

Issued January 6, 1938, with the approval of the Administrator.

A. W. MANCHESTER,
Director, Northeast Division.

A. K. GARDNER,
State Executive Officer.

FRANK W. HUSSEY,
E. L. NEWDICK,
FRED NUTTER,
HAROLD SHAW,
CARL SMITH,
State Committee.



UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL ADJUSTMENT ADMINISTRATION
NORTHEAST DIVISION

1938 Agricultural Conservation Program

Northeast Region

SOIL-BUILDING PRACTICES APPLICABLE IN NEW HAMPSHIRE

ESTABLISHING NEW SEEDINGS:

	Page
Practice No. 1. SEEDING BIENNIAL LEGUMES-----	2
Practice No. 2. SEEDING ALFALFA-----	2
Practice No. 3. SEEDING PERMANENT PASTURE-----	2
Practice No. 4. RESEEDING ESTABLISHED PASTURES-----	2
Practice No. 5. SEEDING TIMOTHY AND REDTOP-----	2

APPLYING FERTILIZERS AND LIME:

Practice No. 6. APPLYING AVAILABLE PHOSPHORIC ACID-----	3
Practice No. 7. APPLYING AVAILABLE POTASH-----	3
Practice No. 8. LIMING CROPLAND AND PASTURE LAND-----	3

GREEN MANURE OR COVER CROPS:

Practice No. 9. GREEN MANURE-----	3
-----------------------------------	---

SOIL EROSION CONTROL:

Practice No. 10. STRIPCROPPING ON THE CONTOUR-----	4
Practice No. 11. CONTOUR CULTIVATION-----	4

MULCHING:

Practice No. 12. MULCHING ORCHARDS OR VEGETABLE LAND-----	4
--------------------------------------------------------------	---

FARM WOODLAND IMPROVEMENT:

Practice No. 13. IMPROVING WOODLANDS-----	5
Practice No. 14. EXCLUDING LIVESTOCK FROM FARM WOOD- LAND-----	5

Practice No. 15. PLANTING FOREST TREES-----	5
---------------------------------------------	---

SOIL-DEPLETING CROPS-----

The following are soil-building practices which are applicable to and approved for the State of New Hampshire. For each practice carried out as specified herein on any farm, credit at the rate indicated in the description of the practice will be given toward achieving the soil-building goal established for the farm under the 1938 Agricultural Conservation Program.

Practices carried out with labor, seed, trees, or materials furnished entirely by any State or Federal agency other than the Agricultural Adjustment Administration shall not be counted toward meeting the soil-building goal. If a portion of the labor, seed, trees, or materials used in carrying out any practice is furnished by a State or Federal agency other than the Agricultural Adjustment Administration, that portion of the total acreage of the practice commensurate with that portion of the total cost not furnished by the State or Federal agency may be counted toward meeting the soil-building goal.

ESTABLISHING NEW SEEDINGS

Practice No. 1.—Seeding Biennial Legumes: *Rate of Credit, 1 Unit per Acre*

Sowing at least 8 pounds per acre of hardy, northern-grown domestic or Canadian medium red clover seed, or sowing at least 5 pounds per acre of hardy, northern-grown domestic or Canadian medium red clover, together with at least 10 pounds per acre of timothy, timothy and redtop, or timothy and other grasses approved by the State committee. Credit will not be given for this practice if such seedings are plowed or disked under for green manure in 1938.

One-half pound of alsike clover may be substituted for 1 pound of medium red clover alone or in mixtures. One pound of alfalfa may be substituted for 1 pound of medium red clover only in mixtures.

Other legume seed approved by the State committee may be substituted for medium red clover.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that enough lime and fertilizer were applied to ordinarily establish a good stand.

Practice No. 2.—Seeding Alfalfa: *Rate of Credit, 2 Units per Acre*

Sowing at least 10 pounds of hardy, adapted, northern-grown domestic or Canadian alfalfa seed per acre on land properly drained. The alfalfa may be sown with other legumes or grasses.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that enough lime and fertilizer were applied to ordinarily establish a good stand.

Practice No. 3.—Seeding Permanent Pasture: *Rate of Credit, 2 Units per Acre*

Seeding a permanent pasture mixture of which at least 2 pounds per acre is white Dutch or ladino clover.

Three pounds of alfalfa seed may be substituted for each pound of ladino or white Dutch clover.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that enough lime and fertilizer were applied to ordinarily establish a good stand.

Practice No. 4.—Reseeding Established Pastures: *Rate of Credit, 1 Unit per Each 10 Pounds of Seed but not in Excess of 1 Unit per Acre*

Reseeding depleted established pastures with good seed of adapted pasture grasses or grasses and legumes.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that enough lime and fertilizer were applied to ordinarily establish a good stand.

Practice No. 5.—Seeding Timothy and Redtop: *Rate of Credit, One-half Unit per Acre*

Seeding timothy, redtop, or mixtures of timothy and redtop where such seeding is in accordance with good farm practice.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that enough lime and fertilizer were applied to ordinarily establish a good stand.

APPLYING FERTILIZERS AND LIME

Practice No. 6.—Applying Available Phosphoric Acid: Rate of Credit, 1 Unit per Each 48 Pounds

Applying available phosphoric acid in connection with the seeding of biennial or perennial legumes, perennial grasses, winter legumes, or permanent pastures, or on orchard, pasture, or hayland sod.

Smallest application for credit----- 12 pounds per acre.
Largest application for credit----- 100 pounds per acre.

When phosphoric acid is used on a nurse crop which is harvested for grain, 32 pounds per acre will be deducted.

Practice No. 7.—Applying Available Potash: Rate of Credit, 1 Unit per Each 100 Pounds

Applying available potash in connection with the seeding of biennial or perennial legumes, perennial grasses, winter legumes, or permanent pastures, or on orchard, pasture, or hayland sod.

Smallest application for credit----- 12 pounds per acre.
Largest application for credit----- 100 pounds per acre.

Practice No. 8.—Liming Cropland or Pasture Land: Rate of Credit, 1 Unit for Each—

1. 800 pounds of standard pulverized limestone,¹
2. 600 pounds of hydrated lime,
3. 400 pounds of quicklime, or
4. 1,500 pounds of field-dug marl.

Applying to cropland or pasture land not more than (1) 6,000 pounds per acre of any pulverized or ground limestone, (2) 4,500 pounds per acre of hydrated lime, (3) 10,500 pounds per acre of field-dug marl, or (4) 3,000 pounds per acre of quicklime.

Other liming materials approved by the State committee may be used.

GREEN MANURE OR COVER CROPS

Practice No. 9.—Green Manure: Rate of Credit, 1 Unit per Acre

Plowing or disking under a good stand and a good growth of (1) biennial or perennial legumes or grasses, for which no credit for seeding is given in 1938 and, except in orchards, from which no crop of such legumes or grasses has been harvested, (2) annual legumes, (3) annual grasses, or (4) small grains.

If the crop is one which is normally winter-killed, credit will be given for leaving a good stand and a good growth on the land instead of plowing or disking it under.

¹ Standard pulverized limestone is limestone which analyzes 50 percent calcium oxide neutralizing equivalents, 100 percent of which will pass through a 20-mesh sieve and at least 60 percent of which will pass through a 100-mesh sieve.

If ground or pulverized limestone which is not as good as standard is used, the rate of credit will be:

1 unit for each 400 pounds of calcium oxide neutralizing equivalent in ground or pulverized limestone (other than standard) which will pass through a 20-mesh sieve.

If the crop is grown in orchards and sufficient fertilizing material has been applied to attain a good stand and a good growth of such crop, evenly distributed on the land, credit will be given for cutting and leaving it on the land instead of plowing or disking it under.

It is not generally good farm practice to plow down green-manure crops if it will result in leaving the land unprotected during the winter. It is recommended, therefore, that crops which are normally winter-killed and which otherwise might be considered as green-manure crops for 1938 be left on the land as a winter cover wherever it is possible.

If on land normally devoted to the production of potatoes a good stand and a good growth of first-crop of second-year clover is cut and left on the land and a good stand and a good growth of second-crop is plowed or disked under, credit will be given for the use of each crop as green manure.

The following minimum rates of seeding per acre are recommended when the following crops are to be used alone as green manure:

Crop:	Amount	Crop—Continued.	Amount
Soybeans-----	lbs. 60	Rye-----	lbs. 60
Red clover (mammoth or medium)-----	lbs. 10	Corn-----	lbs. 30
Vetch-----	lbs. 30	Barley-----	bu. 2½
Field peas-----	lbs. 90	Millet-----	lbs. 30
Crimson clover-----	lbs. 10	Oats-----	bu. 2½
		Buckwheat-----	lbs. 72

SOIL EROSION CONTROL

Practice No. 10.—Stripcropping on the Contour: *Rate of Credit, One-fourth Unit per Acre*

Planting cropland, having a general slope of over 5 percent, in strips, on the contour. Strips of intertilled crops must be separated by strips of close growing crops.

Operators must obtain the approval of the county committee and instructions from the Soil Conservation Service or the Extension Service before performing this practice.

Practice No. 11.—Contour Cultivation: *Rate of Credit, One-sixth Unit per Acre*

Farming intertilled crops on the contour.

Operators must obtain the approval of the county committee and instructions from the Soil Conservation Service or the Extension Service before performing this practice.

MULCHING

Practice No. 12.—Mulching Orchards or Vegetable Land: *Rate of Credit, 1 Unit per Ton*

Applying to orchards or vegetable land not less than 1 ton and not more than 5 tons of mulching material per acre in addition to leaving on the land all materials produced thereon during 1938 from grasses, legumes, green manure or cover crops.

RECOMMENDED MULCHING MATERIALS

	<i>Percentage of weight for credit</i>
1. Air-dried straw-----	100
2. Air-dried tame or marsh hay-----	100
3. Green tame or marsh hay-----	50
4. Seaweed (dry)-----	100
5. Seaweed (wet)-----	25
6. Laying house poultry litter (dry)-----	100
7. Laying house poultry litter (wet)-----	50
8. Pea waste (wet)-----	50
9. Other materials approved by the State committee.	

FARM WOODLAND IMPROVEMENT

Practice No. 13.—Improving Woodlands: *Rate of Credit, 2 Units per Acre*

With prior approval of the county committee, improving the stand of forest trees by thinning, weeding, or partially cutting to develop at least 100 potential or merchantable timber trees of desirable species free to grow well distributed over each acre of woodland, and also have remaining on each acre improved at least two-thirds of a complete crown canopy.

Practice No. 14.—Excluding Livestock from Farm Woodland: *Rate of Credit, One-fourth Unit per Acre*

Restoring farm woodland previously used for pasture by excluding domestic livestock.

Credit will be allowed for each acre of maple-sugar orchard from which domestic livestock are excluded. To be classified as a maple-sugar orchard, the land must have at least 25 maple-sugar trees per acre suitable to be tapped and which have been tapped in the last 5 years. These trees must make up at least one-fourth of the trees on the land.

Credit will also be allowed for each acre of other farm woodland from which livestock are excluded, but not in excess of 2 acres for each animal unit ² which is normally allowed to graze in the woodland.

The operator must obtain approval of the county committee before performing this practice.

Practice No. 15.—Planting Forest Trees: *Rate of Credit, 5 Units per Acre*

Planting not less than 500 transplanted forest trees of varieties approved by the State committee or root-pruned seedlings of varieties approved by the State committee at the rate of at least 1,000 trees per acre.

SOIL-DEPLETING CROPS

Land devoted in 1938 to any of the following crops ³ or uses, or such other similar crops and uses as are designated by the Agricultural Adjustment Administration, shall be classified as soil depleting:

² Animal unit means one cow, one horse, five sheep, five goats, two calves, or two colts, or the equivalent thereof.

³ Volunteer crops, if harvested, shall classify as if planted.

(a) Land planted to any of the following crops for harvest in 1938:

1. Corn (including field corn and popcorn, but excluding sown or close-drilled corn used as a cover crop or green manure crop).
2. Grain sorghums.
3. Mangels and cowbeets.
4. Cultivated sunflowers.
5. Truck and vegetable crops (including strawberries, melons, sweet corn, and sweetpotatoes) and their seeds.
6. Potatoes.
7. Bulbs and flowers.
8. Field beans.
9. Canning peas.
10. Tobacco.

(b) Land from which any of the following crops is harvested for silage, hay, grain, or seed in 1938:

- | | |
|---------------|--------------------------------|
| 1. Wheat. | 7. Sudan grass. |
| 2. Oats. | 8. Millet. |
| 3. Barley. | 9. Sown or close-drilled corn. |
| 4. Rye. | 10. Soybeans. |
| 5. Buckwheat. | 11. Cowpeas. |
| 6. Rape. | 12. Field peas. |

The acreage of land which is devoted consecutively to two or more soil-depleting crops in 1938 shall be counted as follows: (1) If only one of such crops reaches maturity such land shall be regarded as devoted to the crop reaching maturity. (2) If none of such crops reaches maturity or if more than one of such crops reach maturity and an individual crop goal is established for only one of such crops, such land shall be regarded as devoted to the crop for which an individual crop goal is established. (3) If none of such crops reaches maturity and individual crop goals are established for two or more of such crops, the land shall be regarded as devoted to the last planted of such crops for which an individual crop goal is established. (4) If two or more of such crops reach maturity and individual crop goals are established for two or more of such crops reaching maturity, the land shall be regarded as devoted to each of the crops which reached maturity and for which an individual crop goal is established.

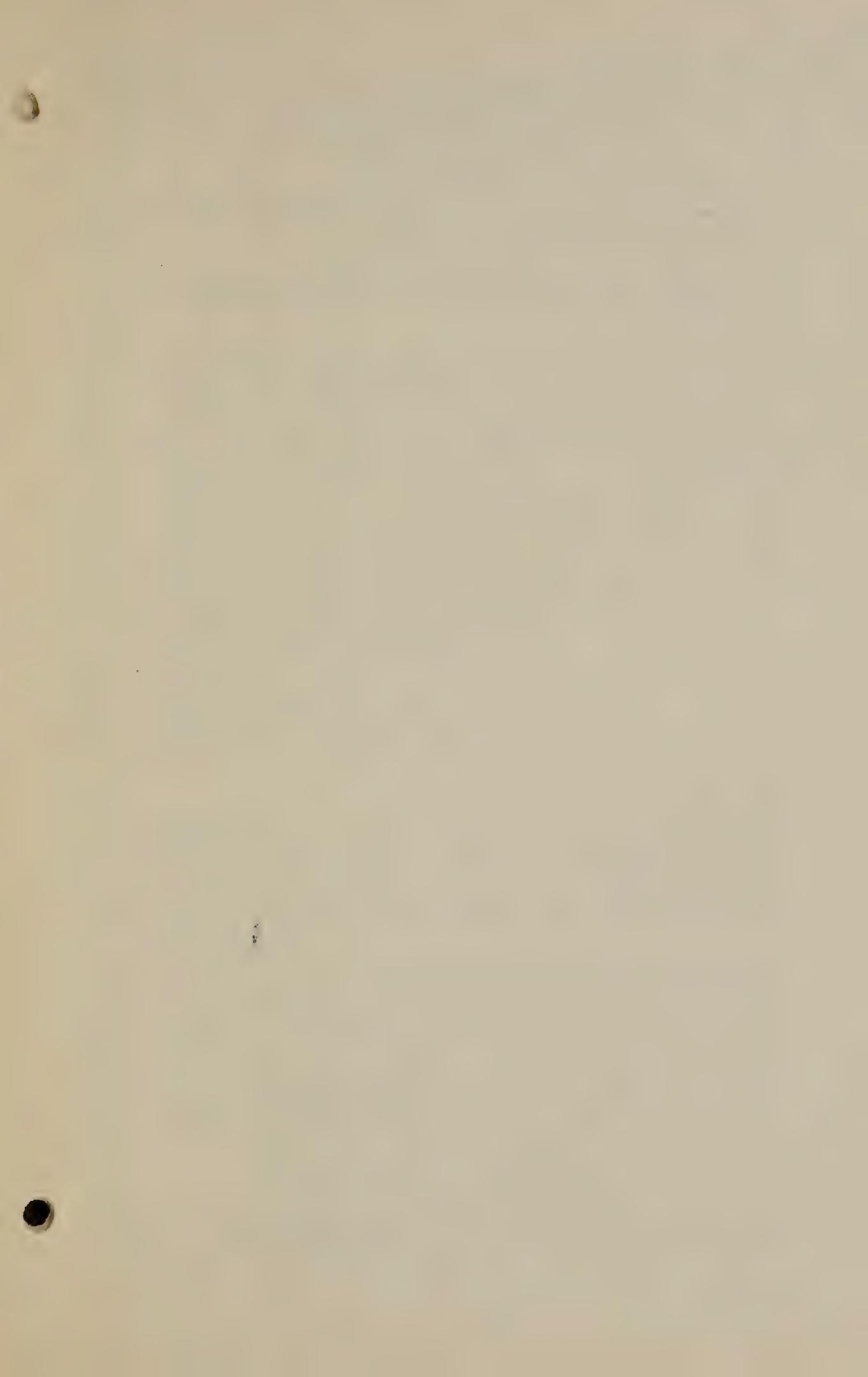
The acreage of land which is devoted simultaneously to two or more soil-depleting crops shall be divided among such crops on the basis of the land determined, in accordance with instructions issued by the Agricultural Adjustment Administration, to be occupied by each.

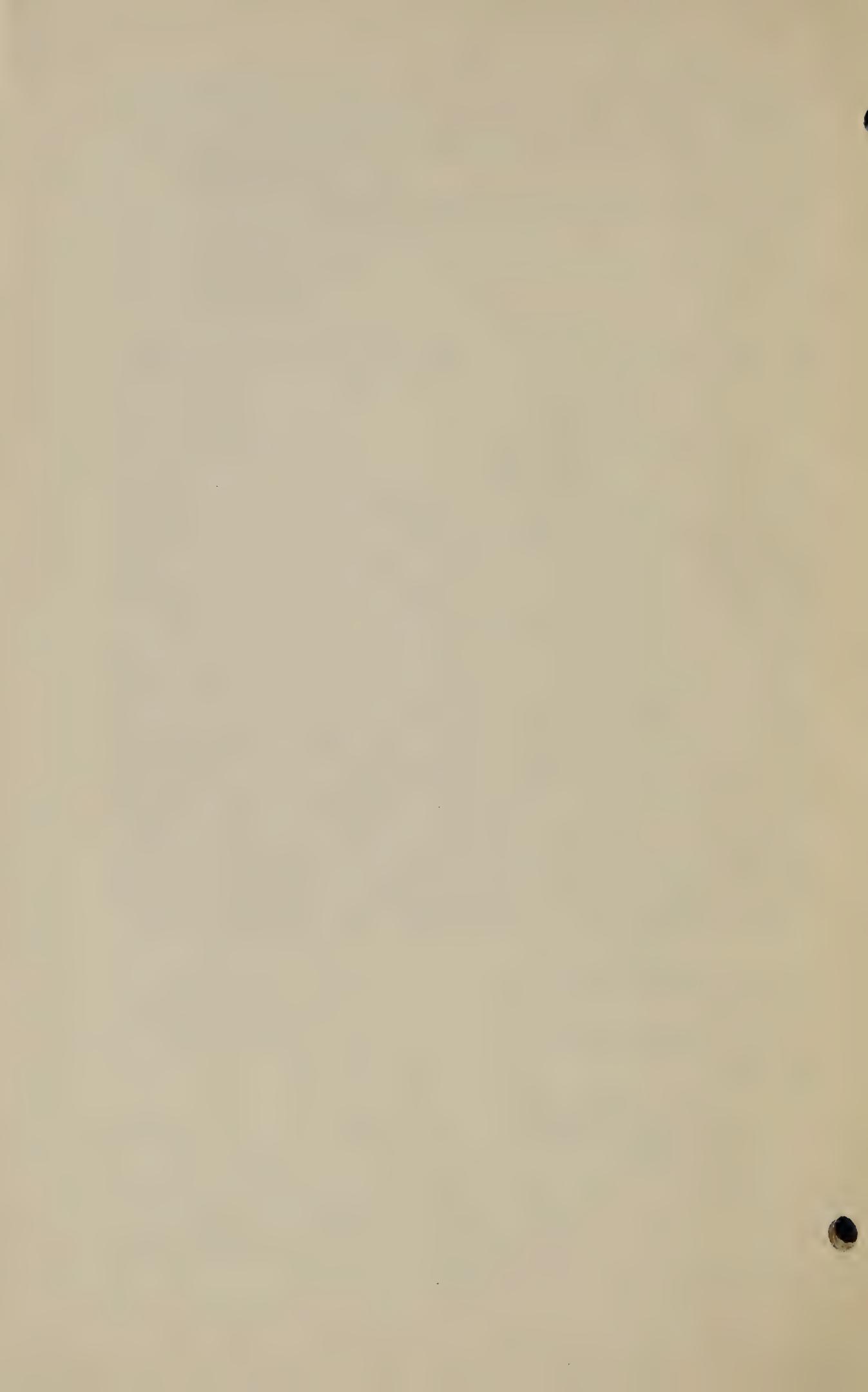
Issued January 13, 1938, with the approval of the Administrator.

A. W. MANCHESTER,
Director, Northeast Division.

EARL P. ROBINSON,
State Executive Officer.

J. RALPH GRAHAM,
ALFRED E. HOUSTON,
PAUL E. SARGEANT,
State Committee.





142
N-167
C-2
1938

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL ADJUSTMENT ADMINISTRATION
NORTHEAST DIVISION

1938 Agricultural Conservation Program

Northeast Region

SOIL-BUILDING PRACTICES APPLICABLE IN NEW JERSEY

ESTABLISHING NEW SEEDINGS:

	Page
Practice No. 1. SEEDING ALFALFA-----	1
Practice No. 2. SEEDING PASTURE-----	2
Practice No. 3. SEEDING BIENNIAL LEGUMES-----	2

GREEN MANURE AND COVER CROPS:

Practice No. 4. GREEN MANURE-----	2
Practice No. 5. SEEDING WINTER LEGUMES-----	2

MULCHING:

Practice No. 6. MULCHING ORCHARD OR VEGETABLE LAND-----	3
---------------------------------------------------------	---

APPLYING LIME AND FERTILIZERS:

Practice No. 7. LIMING CROPLAND OR PASTURE LAND-----	3
Practice No. 8. APPLYING AVAILABLE PHOSPHORIC ACID-----	3
Practice No. 9. APPLYING AVAILABLE POTASH-----	4

FARM WOODLAND IMPROVEMENT:

Practice No. 10. PLANTING FOREST TREES-----	4
Practice No. 11. WOODLAND MANAGEMENT-----	4

SANDING CRANBERRY BOGS:

Practice No. 12. SANDING CRANBERRY BOGS-----	4
----------------------------------------------	---

SOIL-DEPLETING CROPS-----

SOIL-DEPLETING CROPS-----	5
---------------------------	---

The following are soil-building practices which are applicable to and approved for the State of New Jersey. For each practice carried out as specified herein on any farm, credit at the rate indicated in the description of the practice will be given toward achieving the soil-building goal established for the farm under the 1938 Agricultural Conservation Program.

Practices carried out with labor, seed, trees, or materials furnished entirely by any State or Federal agency other than the Agricultural Adjustment Administration shall not be counted toward meeting the soil-building goal. If a portion of the labor, seed, trees, or materials used in carrying out any practice is furnished by a State or Federal agency other than the Agricultural Adjustment Administration, that portion of the total acreage of the practice commensurate with that portion of the total cost not furnished by the State or Federal agency may be counted toward meeting the soil-building goal.

ESTABLISHING NEW SEEDINGS

Practice No. 1.—Seeding Alfalfa: *Rate of Credit, 2 Units Per Acre*

Sowing (1) at least 8 pounds per acre of alfalfa seed bearing either the United States verified origin tag from Kansas, Utah or a State

farther north, or Canada, or the State certification tag identifying it as Grimm alfalfa seed; or (2) any mixture containing at least 8 pounds per acre of such seed. The seeding shall be made on cropland on which a good seed bed is prepared.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that sufficient lime and fertilizer were applied to ordinarily establish a good stand.

Practice No. 2.—Seeding Pasture: *Rate of Credit, 2 Units Per Acre*

Sowing a pasture mixture containing at least 5 pounds per acre of biennial or perennial legumes and at least 5 pounds per acre of perennial grasses other than timothy or redtop.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that sufficient lime and fertilizer were applied to ordinarily establish a good stand.

Practice No. 3.—Seeding Biennial Legumes: *Rate of Credit, 1 Unit Per Acre*

Seeding at least 5 pounds per acre of hardy domestic (unstained) or Canadian (stained 1 percent violet) medium red clover or its equivalent, (1) alone or (2) in mixtures with grasses or other clovers.

The following shall be considered the equivalent of 5 pounds of red clover:

8 pounds of white sweet clover	4 pounds of alsike clover
--------------------------------	-------	---------------------------

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that sufficient lime and fertilizer were applied to ordinarily establish a good stand.

GREEN MANURE AND COVER CROPS

Practice No. 4.—Green Manure: *Rate of Credit, 1 Unit Per Acre*

Plowing or disking under a good stand and a good growth of (1) biennial or perennial legumes or grasses, for which no credit for seeding is given in 1938 and from which no crop of such legumes or grasses has been harvested, (2) annual legumes, (3) annual grasses, or (4) small grains. If the crop is one which is normally winter-killed, credit will be given for leaving a good stand and a good growth on the land instead of plowing or disking it under.

It is not generally good farm practice to plow down green manure crops if it will result in leaving the land unprotected during the winter. It is recommended, therefore, that crops which are normally winter-killed and which otherwise might be considered as green manure crops for 1938 be left on the land as a winter cover wherever it is possible.

Practice No. 5.—Seeding Winter Legumes: *Rate of Credit, 1 Unit Per Acre*

Seeding (1) at least 20 pounds per acre of winter vetch not later than October 15, 1938; (2) at least 15 pounds per acre of crimson clover not later than September 1, 1938; or (3) at least 20 pounds of a mixture of these not later than October 1, 1938, and leaving the resulting crop on the land as a winter cover crop.

MULCHING

Practice No. 6.—Mulching Orchard or Vegetable Land: *Rate of Credit, 1 Unit Per Ton*

Applying not less than 1 ton and not more than 5 tons per acre of air-dried straw or equivalent mulching material to orchard or vegetable land as a mulch if all materials produced on the land during 1938 from grasses, legumes, green manure crops, or cover crops are left on the land.

APPLYING LIME AND FERTILIZERS

Practice No. 7.—Liming Cropland or Pasture Land: *Rate of Credit:*

1 Unit for each (1) 800 pounds of standard ground limestone or standard ground oyster shell, (2) 560 pounds of hydrated lime, or (3) 2,400 pounds of acetylene waste lime.

1 Unit for each 400 pounds of total calcium and magnesium oxide in ground limestone (other than standard) or ground oyster shell (other than standard) which will pass through a 20-mesh sieve.

Applying not less than 1,000 pounds and not more than 6,000 pounds of standard ground limestone or its equivalent per acre to pasture land or cropland.

Standard ground limestone and standard ground oyster shell are limestone and oyster shell which will analyze at least 50 percent total magnesium and calcium oxides, 100 percent of which will pass through a 20-mesh sieve and at least 60 percent of which will pass through a 100-mesh sieve.

700 pounds of hydrated lime and 3,000 pounds of acetylene waste lime are equivalents of 1,000 pounds of standard ground limestone.

The following table gives the smallest and largest amounts of ground limestone or ground oyster shell of different degrees of fineness which can be applied per acre for credit:

Percentage of material which will pass through a 100-mesh sieve	Smallest number of pounds of material per acre	Largest number of pounds of material per acre
60 and over-----	1,000	6,000
50 to 60-----	1,250	7,500
40 to 50-----	1,500	9,000
30 to 40-----	2,000	12,000
20 to 30-----	2,500	15,000
10 to 20-----	3,000	18,000

Equivalent quantities of other liming material approved by the State committee may be used.

Practice No. 8.—Applying Available Phosphoric Acid: *Rate of Credit, 1 Unit Per Each 48 Pounds*

Applying available phosphoric acid to or in connection with the seeding of perennial or biennial legumes, perennial grasses, winter legumes, or permanent pastures.

Smallest application for credit-----	16 pounds per acre
Largest application for credit-----	96 pounds per acre

When phosphoric acid is used on a nurse crop which is harvested for grain, 32 pounds per acre will be deducted.

Practice No. 9.—Applying Available Potash: *Rate of Credit, 1 Unit Per Each 100 Pounds*

Applying at least 7.5 pounds of available potash per acre to or in connection with the seeding of perennial or biennial legumes, perennial grasses, winter legumes, or permanent pastures.

Smallest application for credit-----	7.5 pounds per acre
Largest application for credit-----	75 pounds per acre

FARM WOODLAND IMPROVEMENT

Practice No. 10.—Planting Forest Trees: *Rate of Credit, 5 Units Per Acre*

Planting transplanted forest trees of approved varieties at the rate of at least 1,000 trees per acre on suitable land.

Operators are advised to obtain instructions for performing this practice from the county agricultural agent or county committee.

Approved varieties for planting are:

White ash	Norway spruce	White pine
Tulip poplar	Scotch pine	Red oak
Black walnut	Red pine	White oak
Black locust		

The following varieties are approved for south Jersey only:

Loblolly pine	White cedar	Short leaf pine
---------------	-------------	-----------------

Other varieties may be planted if the county committee, following the advice of the county agricultural agent, approves the selection.

Hardwood species should be 1- or 2-year seedlings. Evergreens should be 2-year seedlings or transplants.

April is the preferable planting month for north Jersey. March or April is preferable for south Jersey. October or November is the second choice.

Practice No. 11.—Woodland Management: *Rate of Credit, 2 Units Per Acre*

Improving the stand of forest trees by thinning, weeding, or pruning to develop at least 100 potential timber trees of desirable species, well distributed over each acre of woodland improved.

Operators shall obtain prior approval from the county committee and carry out the practice in accordance with the recommendations of the Extension Service.

Desirable species for development are those named in practice 10.

SANDING CRANBERRY BOGS

Practice No. 12.—Sanding Cranberry Bogs: *Rate of Credit, 5 Units Per Acre*

Applying sand, free from stones or loam, to a depth of at least $\frac{1}{2}$ inch on fruiting cranberry bogs to prevent soil deterioration and decline in the productive capacity of the land.

The county committee will require evidence as to the number of cubic yards of sand applied per acre.

SOIL-DEPLETING CROPS

Land devoted in 1938 to any of the following crops¹ or uses, or such other similar crops and uses as are designated by the Agricultural Adjustment Administration, shall be classified as soil-depleting:

(a) Land planted to any of the following crops for harvest in 1938:

- (1) Corn (including field corn and popcorn, but excluding sown or close-drilled corn used as a cover crop or green manure crop)
- (2) Grain sorghums
- (3) Mangels and cowbeets
- (4) Cultivated sunflowers
- (5) Truck and vegetable crops (including strawberries, melons, sweet corn, and sweetpotatoes) and their seeds
- (6) Potatoes
- (7) Bulbs and flowers
- (8) Field beans
- (9) Canning peas

(b) Land from which any of the following crops is harvested for silage, hay, grain, or seed, in 1938:

- | | |
|---------------|--------------------------------|
| (1) Wheat | (7) Sudan grass |
| (2) Oats | (8) Millet |
| (3) Barley | (9) Sown or close-drilled corn |
| (4) Rye | (10) Soybeans |
| (5) Buckwheat | (11) Cowpeas |
| (6) Rape | (12) Field peas |

The acreage of land which is devoted consecutively to two or more soil-depleting crops in 1938 shall be counted as follows: (1) If only one of such crops reaches maturity, such land shall be regarded as devoted to the crop reaching maturity; and (2) if none of such crops reaches maturity, or if more than one of such crops reach maturity and one of such crops is potatoes, such land shall be regarded as devoted to potatoes.

The acreage of land which is devoted simultaneously to two or more soil-depleting crops shall be divided among such crops on the basis of the land determined, in accordance with instructions issued by the Agricultural Adjustment Administration, to be occupied by each.

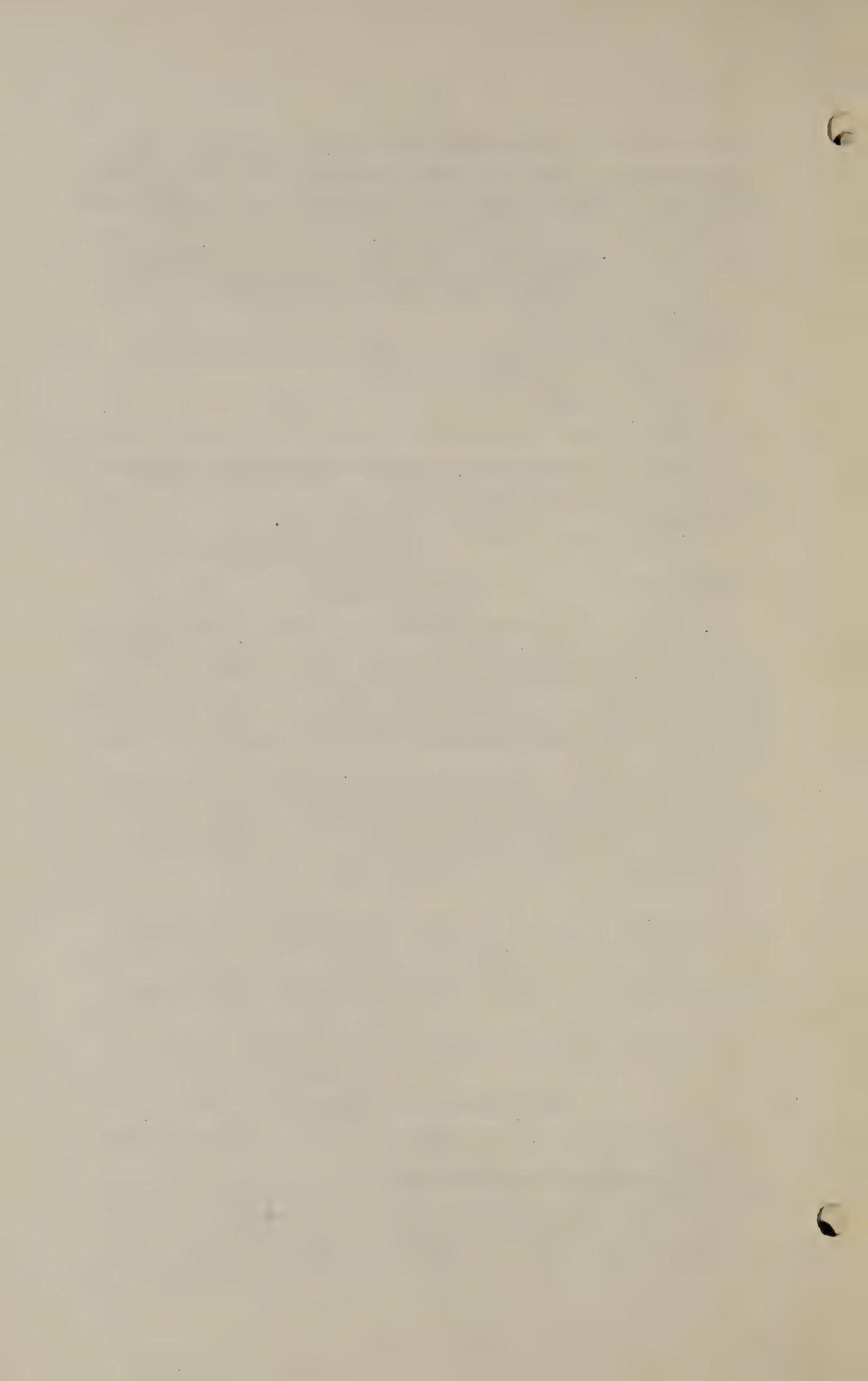
Issued January 6, 1938, with the approval of the Administrator.

A. W. MANCHESTER,
Director, Northeast Division.

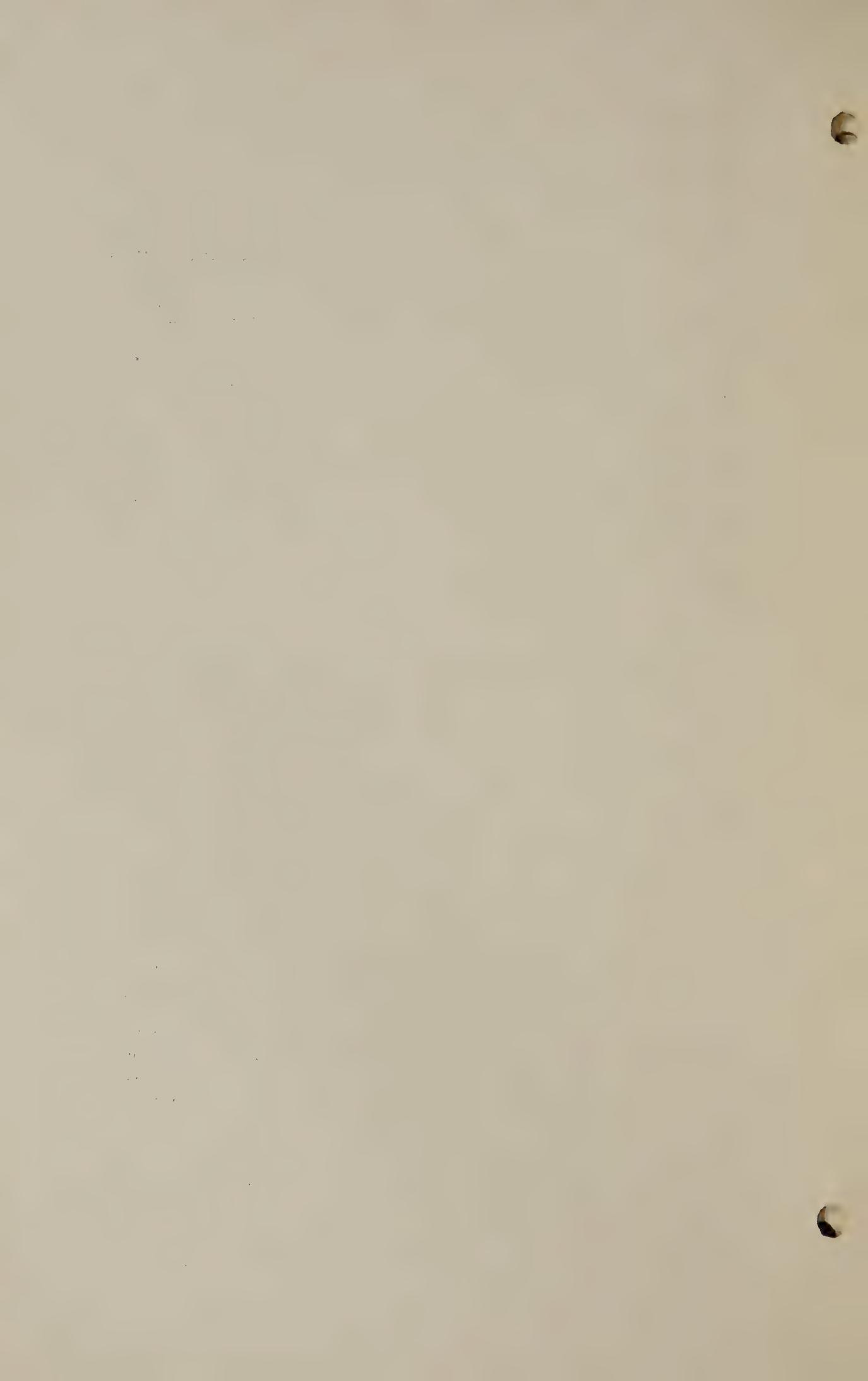
E. A. GAUNTT,
State Executive Officer.

W. W. ELLIOTT,
SPENCER W. PERRINE,
KENNETH ROBERTS,
CHAS. A. COLLINS,
H. O. PACKARD,
State Committee.

¹ Volunteer crops, if harvested, shall classify as if planted.







UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL ADJUSTMENT ADMINISTRATION
NORTHEAST DIVISION

1938 Agricultural Conservation Program

Northeast Region

SOIL-BUILDING PRACTICES APPLICABLE IN NEW YORK

	Page
ESTABLISHING NEW SEEDINGS:	
Practice No. 1. SEEDING LEGUMES AND GRASSES-----	2
Practice No. 2. SEEDING ALSIKE AND RED CLOVER-----	2
Practice No. 3. SEEDING SWEET CLOVER-----	3
Practice No. 4. SEEDING ALFALFA-----	3
Practice No. 5. SEEDING PASTURES-----	3
Practice No. 6. RENOVATION OF LEGUMES AND GRASSES-----	3
APPLYING FERTILIZERS AND LIME:	
Practice No. 7. APPLYING SUPERPHOSPHATE-----	3
Practice No. 8. APPLYING POTASH-----	3
Practice No. 9. LIMING-----	4
GREEN MANURE AND COVER CROPS:	
Practice No. 10. GREEN MANURE-----	5
Practice No. 11. SEEDING WINTER LEGUMES-----	5
MULCHING:	
Practice No. 12. MULCHING ORCHARD AND VEGETABLE LAND-----	5
WOODLAND PRACTICES:	
Practice No. 13. PLANTING FOREST TREES-----	5
Practice No. 14. WOOD-LOT MANAGEMENT-----	6
Practice No. 15. EXCLUDING LIVESTOCK FROM FARM WOODLAND-----	6
SOIL-EROSION CONTROL:	
Practice No. 16. PLANTING SHRUB WINDBREAKS ON MUCK LAND-----	6
Practice No. 17. MAINTAINING SHRUB WINDBREAKS ON MUCK LAND-----	6
Practice No. 18. STRIPCROPPING-----	7
Practice No. 19. CONTOUR FARMING-----	7
Practice No. 20. TERRACING-----	7
SOIL-DEPLETING CROPS-----	7

The following are soil-building practices which are applicable to and approved for the State of New York. For each practice carried out, as specified herein, on any farm, credit at the rate indicated in the description of the practice will be given toward achieving the

soil-building goal established for the farm under the 1938 Agricultural Conservation Program.

Practices carried out with labor, seed, trees, or materials furnished entirely by any State or Federal agency other than the Agricultural Adjustment Administration shall not be counted toward meeting the soil-building goal. If a portion of the labor, seed, trees, or materials used in carrying out any practice is furnished by a State or Federal agency other than the Agricultural Adjustment Administration, that portion of the total acreage of the practice commensurate with that portion of the total cost not furnished by the State or Federal agency may be counted toward meeting the soil-building goal.

ESTABLISHING NEW SEEDINGS

Credit will be given for any of the following seeding practices, numbers 1 to 6, provided at least 300 pounds of 20-percent superphosphate or its equivalent¹ per acre are applied to the same land in 1938 at or before the time of seeding, or satisfactory evidence is presented to the county committee that this amount of material was applied to the same land after July 15, 1937, in preparation for the seeding, and provided the seeding is not plowed or disked under for a green manure crop in 1938.

Practice No. 1.—Seeding Legumes and Grasses: *Rate of Credit*, 1 Unit per Acre

Seeding at least 14 pounds per acre of a mixture of legumes and timothy or other grasses. The mixture shall contain at least (1) 5 pounds of alsike clover, or (2) 5 pounds of hardy, adapted, northern-grown domestic or Canadian-grown red clover or alfalfa seed, or (3) 5 pounds of a mixture of any or all of these legumes.

— or —

Seeding at least 5 pounds per acre of (1) alsike clover, (2) hardy adapted, northern-grown domestic or Canadian-grown red clover or alfalfa seed, or (3) 5 pounds of a mixture of any or all of these legumes. The seeding shall be made on land where at least 9 pounds per acre of timothy, redtop, or other grasses were seeded in the fall of 1937.

Practice No. 2.—Seeding Alsike and Red Clover: *Rate of Credit*, 1 Unit per Acre

Seeding at least (1) 8 pounds of alsike clover or hardy, adapted, northern-grown domestic or Canadian-grown medium red clover seed, or (2) a mixture of at least 8 pounds of these two clovers per acre. Timothy and other grasses may be used in addition to these legumes.

¹ The equivalents of 300 pounds of 20 percent superphosphate are:

187.5 pounds of 32 percent superphosphate, or
375 pounds of 16 percent superphosphate, or
375 pounds of 4-16-4 mixed fertilizer, or
500 pounds of 4-12-4 mixed fertilizer, or
600 pounds of 5-10-5 mixed fertilizer, or
750 pounds of 4-8-7 mixed fertilizer.

Applying the amount shown of any one of the above materials or its equivalent per acre will meet the requirements.

Practice No. 3.—Seeding Sweet Clover: *Rate of Credit*, 1 Unit per Acre

Seeding at least 12 pounds of hulled sweet clover seed per acre, or mixtures containing at least 12 pounds of hulled sweet clover seed per acre.

Practice No. 4.—Seeding Alfalfa: *Rate of Credit*, 2 Units per Acre

Seeding at least 12 pounds of hardy, adapted, northern-grown domestic or Canadian-grown alfalfa seed per acre, alone or in mixtures.

Practice No. 5.—Seeding Pastures: *Rate of Credit*, 2 Units per Acre

Seeding at least 19 pounds per acre of a mixture of biennial or perennial legumes or grasses other than timothy and redtop, alone or in Cornell Pasture or Hay Pasture Mixture, on land prepared for seeding by harrowing or plowing.

Practice No. 6.—Renovation of Legumes and Grasses: *Rate of Credit*: One-half Unit per Acre

Renovating the grasses and legumes in established pastures by seeding at least 1 pound per acre of wild white clover seed having a certificate of origin approved by the New York State College of Agriculture, Extension Service.

APPLYING FERTILIZERS AND LIME**Practice No. 7.—Applying Superphosphate: *Rate of Credit*, 1 $\frac{1}{4}$ Units for Each 300 Pounds of 20-Percent Superphosphate or Its Equivalent**

Applying from 300 to 600 pounds of 20-percent superphosphate or its equivalent² per acre, (1) in connection with the seeding of vetch to be used as a winter cover crop, clover, alfalfa, pasture mixtures, or (2) to established pastures, haylands, or orchard sods.

One hundred and sixty pounds of 20-percent superphosphate or its equivalent per acre will be deducted if it is applied in connection with a seeding made in a nurse crop which is harvested for grain.

Practice No. 8.—Applying Potash: *Rate of Credit*, One-half Unit for Each 100 Pounds of 50-Percent Muriate of Potash, or Its Equivalent

Applying from 60 to 240 pounds of 50-percent muriate of potash or its equivalent per acre (1) at or before the time of seeding vetch to be used as a winter cover crop, clover, alfalfa, or pasture mixtures, or (2) for improving established haylands or pastures.

Credit will be given for potash only when at least 300 pounds of 20-percent superphosphate or its equivalent³ per acre is applied to the same land.

² The equivalent of 300 to 600 pounds of 20-percent superphosphate are—
187.5 to 375 pounds of 32 percent superphosphate, or
375 to 750 pounds of 16 percent superphosphate, or
375 to 750 pounds of 4-16-4 mixed fertilizer, or
500 to 1,000 pounds of 4-12-4 mixed fertilizer, or
600 to 1,200 pounds of 5-10-5 mixed fertilizer, or
750 to 1,500 pounds of 4-8-7 mixed fertilizer.

The amounts of material or their equivalents, as shown in the above table, are the minimum and maximum amounts for which payments may be made.

³ See footnote 1 on p. 2.

Practice No. 9.—Liming: Rate of Credit

Area A.—All of the State except Long Island and Staten Island:

2 units for each (1) 2,000 pounds of standard pulverized limestone, or standard pulverized oyster shell,⁴ (2) 1,500 pounds of hydrated lime, (3) 1,000 pounds of ground burned lime, or (4) amounts of other materials approved by the State committee as being equivalent to 2,000 pounds of standard pulverized limestone.

Area B.—Long Island and Staten Island:

2½ units for each (1) 2,000 pounds of standard pulverized limestone, or standard pulverized oyster shell,⁴ (2) 1,500 pounds of hydrated lime, (3) 1,000 pounds of ground burned lime, or (4) amounts of other materials approved by the State committee as being equivalent to 2,000 pounds of standard pulverized limestone.

Applying to cropland, pasture land, or orchards (1) from 2,000 to 4,000 pounds of standard pulverized limestone or standard pulverized oyster shell⁴ per acre, (2) 1,500 to 3,000 pounds of hydrated lime per acre, (3) 1,000 to 2,000 pounds of ground burned lime per acre, or (4) amounts of other materials per acre approved by the State committee.

— or —

Applying to land used year after year for the production of potatoes or vegetables, not less than 1,000 pounds of standard pulverized limestone or standard pulverized oyster shell⁴ per acre, 750 pounds of hydrated lime per acre, 500 pounds of ground burned lime per acre, or amounts of other materials per acre approved by the State committee.

Standard pulverized limestone or oyster shell is limestone or oyster shell which analyzes at least 50 percent total calcium and magnesium oxides, 100 percent of which will pass through a 20-mesh sieve and at least 25 percent of which will pass through a 100-mesh sieve.

⁴ If other than standard ground or pulverized limestone or oyster shell is used, the credit given and application required will be as follows:

Rate of credit:

Area A.—1 unit for each 500 pounds of total calcium and magnesium oxides in pulverized or ground limestone or oyster shell (other than standard) which will pass through a 20-mesh sieve.

Area B.—1 unit for each 400 pounds of total calcium and magnesium oxides in pulverized or ground limestone or oyster shell (other than standard) which will pass through a 20-mesh sieve.

The following table gives the smallest and largest amounts of pulverized or ground limestone or oyster shell (other than standard) of different degrees of fineness which can be applied per acre for credit:

Percentage of material which will pass through a 100-mesh sieve	Smallest number of pounds of material per acre on land used year after year for vegetables or potatoes	Smallest number of pounds of material per acre on crop and pasture land	Largest number of pounds of material per acre
20 to 24.9	1,250	2,500	5,000
15 to 19.9	1,750	3,500	7,000
10 to 14.9	2,500	5,000	10,000
Less than 10	5,000	10,000	20,000

GREEN MANURE AND COVER CROPS

Practice No. 10.—Green Manure: *Rate of Credit*, 1 Unit per Acre

Plowing or disk ing under a good stand of (1) biennial or perennial legumes or grasses, for which no credit for seeding is given in 1938 and from which no crop of such legumes or grasses (except in orchards) has ever been harvested, (2) annual legumes, (3) annual grasses, or (4) small grains. These crops shall have attained a good growth.

If the crop is one which is normally winter-killed and there is a good stand and a good growth, credit will be given for leaving it as a cover crop to protect the land from erosion instead of plowing or disk ing it under.

In orchards where there is a good established sod, even though a crop of hay may have been harvested in previous years, credit will be given for cutting and leaving all of the crop on the land instead of plowing or disk ing it under, provided a sufficient amount of fertilizer is applied to the sod to produce a good growth evenly distributed over the orchard.

Practice No. 11.—Seeding Winter Legumes: *Rate of Credit*, 1 Unit per Acre

Seeding winter vetch not later than October 1, 1938, at the rate of at least 25 pounds of inoculated seed per acre and leaving the resulting crop on the land as a winter cover crop. It is recommended that the vetch be seeded with a support crop such as rye.

MULCHING

Practice No. 12.—Mulching Orchard and Vegetable Land: *Rate of Credit*, 1 Unit per Ton

Applying not less than 1 ton and not more than 5 tons per acre of air-dried mulching material or its equivalent to orchard or vegetable land, in addition to leaving on the land all materials produced thereon during 1938 from grasses, legumes, green manure, or cover crops. The crops produced on this land and the mulching material may be plowed or disk ed into the soil.

WOODLAND PRACTICES

Practice No. 13.—Planting Forest Trees: *Rate of Credit*, 5 Units per Acre

Planting nursery-grown forest-tree transplants or seedlings or lifted wild stock at the rate of at least 1,000 trees per acre spaced about 6 by 6 feet on open farm land. When white-pine plantings are made, currant and gooseberry bushes within 1,000 feet of the planting site shall be removed.

The following varieties of forest trees are recommended for planting: White cedar, balsam fir, European larch, Japanese larch, black locust, red pine, Scotch pine, white pine, jack pine, and white spruce,

Norway spruce, white ash, basswood, black cherry, sugar maple, red oak, and bitternut hickory.

Other varieties may be planted if the county committee, on the advice of the New York State College of Agriculture, Extension Service, approves the selection.

Practice No. 14.—Wood-Lot Management: *Rate of Credit, 2 Units per Acre*

Improving the stand of forest trees on not more than 4 acres by thinning or weeding to develop a good stand of potential timber trees of desirable species well distributed over the area of woodland. This practice is to be carried out according to plans approved in advance by the county committee based on the recommendations of the New York State College of Agriculture, Extension Service.

Practice No. 15.—Excluding Livestock from Farm Woodland: *Rate of Credit, One-fourth Unit per Acre*

Restoring farm woodland previously used for pasture by excluding livestock. Credit will be allowed for each acre of woodland from which livestock are excluded but not in excess of 2 acres for each animal unit⁵ which is normally allowed to graze in the woodland.

The operator must obtain the approval of the county committee before performing this practice.

SOIL-EROSION CONTROL

Practice No. 16.—Planting Shrub Windbreaks on Muck Land: *Rate of Credit, One-half Unit per Acre*

Planting shrubs approved by the county committee not more than 1 foot apart in parallel rows not more than 250 feet apart on muck land. This practice is to be carried out according to plans approved in advance by the county committee based on the recommendations of the New York State College of Agriculture, Extension Service.

Practice No. 17.—Maintaining Shrub Windbreaks on Muck Land: *Rate of Credit, One-half Unit per Acre*

Maintaining shrub windbreaks which are not over 10 years old and which have been planted in accordance with the recommendations of the State College of Agriculture, Extension Service. Maintenance shall include replacing dead shrubs, pruning or cutting back live shrubs as needed to secure sufficient thickness and vigor of growth to assure adequate protection against erosion, and other measures necessary to maintain a well-kept, effective hedge. Credit will be given only if, on inspection, the windbreaks are found to be thick, well-kept, and solidly planted with live shrubs.

⁵ Animal unit means one cow, one horse, five sheep, five goats, two calves, or two colts or the equivalent thereof.

Practice No. 18.—Stripcropping: *Rate of Credit*, One-fourth Unit per Acre

Establishing and maintaining alternate contour strips of intertilled and close-growing crops. This practice is to be carried out according to plans approved in advance by the county committee based on the recommendations of the Soil Conservation Service or the New York State College of Agriculture, Extension Service.

Practice No. 19.—Contour Farming: *Rate of Credit*, One-sixth Unit per Acre

Cultivating intertilled crops on the contour. This practice is to be carried out according to plans approved in advance by the county committee, based on the recommendations of the Soil Conservation Service or the New York State College of Agriculture, Extension Service.

Practice 20.—Terracing: *Rate of Credit*, 1 Unit for 200 Linear Feet

Construction of diversion ditches for which proper outlets are provided. This practice is to be carried out according to plans approved in advance by the county committee based on the recommendations of the Soil Conservation Service or the New York State College of Agriculture, Extension Service.

SOIL-DEPLETING CROPS

Land devoted in 1938 to any of the following crops⁶ or uses, or such other similar crops and uses as are designated by the Agricultural Adjustment Administration, shall be classified as soil-depleting:

(a) Land planted to any of the following crops for harvest in 1938:

- (1) Corn (including field corn and popcorn, but excluding sown or close-drilled corn used as a cover crop or green manure crop)
- (2) Grain sorghums
- (3) Tobacco
- (4) Mangels and cowbeets
- (5) Cultivated sunflowers
- (6) Truck and vegetable crops (including strawberries, melons, sweet corn, and sweetpotatoes) and their seeds
- (7) Potatoes
- (8) Bulbs and flowers
- (9) Field beans
- (10) Canning peas

(b) Land from which any of the following crops is harvested for silage, hay, grain, or seed in 1938:

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> (1) Wheat (2) Oats (3) Barley (4) Rye (5) Buckwheat (6) Rape | <ul style="list-style-type: none"> (7) Sudan grass (8) Millet (9) Sown or close-drilled corn (10) Soybeans (11) Cowpeas (12) Field peas |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

* Volunteer crops, if harvested, shall classify as if planted.

The acreage of land which is devoted consecutively to two or more soil-depleting crops in 1938 shall be counted as follows: (1) If only one of such crops reaches maturity such land shall be regarded as devoted to the crop reaching maturity. (2) If none of such crops reaches maturity or if more than one of such crops reach maturity and an individual acreage allotment is established for only one of such crops, such land shall be regarded as devoted to the crop for which an individual acreage allotment is established. (3) If none of such crops reaches maturity and individual acreage allotments are established for two or more of such crops, the land shall be regarded as devoted to the last planted of such crops for which an individual acreage allotment is established. (4) If two or more of such crops reach maturity and individual acreage allotments are established for two or more of such crops reaching maturity, the land shall be regarded as devoted to each of the crops which reached maturity and for which an individual acreage allotment is established.

The acreage of land which is devoted simultaneously to two or more soil-depleting crops shall be divided among such crops on the basis of the land, determined in accordance with instructions issued by the Agricultural Adjustment Administration, to be occupied by each.

Issued February 10, 1938, with the approval of the Administrator.

A. W. MANCHESTER,
Director, Northeast Division.

EARL A. FLANSBURGH,
State Executive Officer.

ROY A. PORTER,
LEON A. CHAPIN,
CARL G. WOOSTER,
RALPH Y. DE WOLFE,
JOHN WICKHAN,
State Committee.

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL ADJUSTMENT ADMINISTRATION
NORTHEAST DIVISION

1938 Agricultural Conservation Program

Northeast Region

SOIL-BUILDING PRACTICES APPLICABLE IN PENNSYLVANIA

FARM WOODLAND IMPROVEMENT:	
Practice No. 1. PLANTING FOREST TREES-----	2
Practice No. 2. IMPROVING WOODLANDS-----	2
Practice No. 3. EXCLUDING LIVESTOCK FROM FARM WOODLAND-----	2
ESTABLISHING NEW SEEDINGS:	
Practice No. 4. SEEDING PASTURE MIXTURES-----	3
Practice No. 5. RESEEDING-----	3
Practice No. 6. ESTABLISHING NEW SEEDINGS OF ALFALFA-----	3
Practice No. 7. ESTABLISHING NEW SEEDINGS OF CLOVER-----	4
GREEN MANURE AND COVER CROPS:	
Practice No. 8. GREEN MANURE-----	4
Practice No. 9. SEEDING WINTER LEGUMES-----	4
MULCHING:	
Practice No. 10. MULCHING ORCHARD OR VEGETABLE LAND-----	4
SOIL-EROSION CONTROL:	
Practice No. 11. STRIPCROPPING-----	5
Practice No. 12. CONTOUR FURROWING NONCROP, OPEN PASTURE LAND-----	5
Practice No. 13. TERRACING-----	5
APPLYING LIME AND FERTILIZER:	
Practice No. 14. LIMING CROPLAND, PASTURE LAND, OR ORCHARDS-----	5
Practice No. 15. APPLYING AVAILABLE PHOSPHORIC ACID-----	6
Practice No. 16. APPLYING AVAILABLE POTASH-----	6
SOIL-DEPLETING CROPS-----	
	6

The following are soil-building practices which are applicable to and approved for the State of Pennsylvania. For each practice carried out as specified herein on any farm credit at the rate indicated in the description of the practice will be given toward achieving the soil-building goal established for the farm under the 1938 agricultural conservation program.

Practices carried out with labor, seed, trees, or materials furnished entirely by any State or Federal agency other than the Agricultural Adjustment Administration shall not be counted toward meeting the soil-building goal. If a portion of the labor, seed, trees, or materials

used in carrying out any practice is furnished by a State or Federal agency other than the Agricultural Adjustment Administration, that portion of the total acreage of the practice commensurate with that portion of the total cost not furnished by the State or Federal agency may be counted toward meeting the soil-building goal.

FARM WOODLAND IMPROVEMENT

Practice No. 1.—Planting Forest Trees: *Rate of Credit, 5 Units per Acre*

Planting transplanted evergreen or deciduous forest trees (except sugar maples) at the rate of at least 1,000 trees per acre. The planting of $1\frac{1}{2}$ acres of seedlings at the rate of at least 1,000 trees per acre is equivalent to planting one acre of transplants. The planting of 2 acres of sugar maple trees at the rate of at least 500 trees per acre is equivalent to planting one acre of transplants. The trees are to be evenly distributed and adequately protected against livestock grazing.

Credit for more than one area, if smaller than 1 acre, will be given if the total of all such areas on the farm is equal to one-half acre or more.

The following varieties of forest trees are recommended for planting: Japanese larch, pitch pine, Norway spruce, black locust, red pine, white spruce, red oak, white pine, Scotch pine, black walnut, Banks pine, and sugar maple.

Other varieties may be planted if the county committee, on the advice of the State extension forester, approves the selection.

Practice No. 2.—Improving Woodlands: *Rate of Credit, 2 Units per Acre*

Improving the stand of forest trees on not more than 5 acres by cutting weed trees or thinning or pruning other trees to develop at least 100 potential timber trees of desirable species well distributed over each acre of woodland improved.

Operators shall obtain prior approval of the county committee and instructions in accordance with recommendations of the State extension forester before performing this practice.

Practice No. 3.—Excluding Livestock From Farm Woodland: *Rate of Credit, One-fourth Unit per Acre*

Restoring farm woodland previously used for pasture by excluding livestock. Credit will be allowed for each acre of woodland from which livestock are excluded, but not in excess of 2 acres for each animal unit¹ which is normally allowed to graze in the woodland.

Operators shall obtain approval of the county committee before performing this practice.

¹ Animal unit means one cow, one horse, five sheep, five goats, two calves, or two colts, or the equivalent thereof.

ESTABLISHING NEW SEEDINGS

In order for credit to be given for the following seeding practices, the following conditions with respect to fertilizer and lime must be met:

FERTILIZER.—Either (1) at least 36 pounds of available phosphoric acid must be applied per acre in 1938 at or before the time of seeding, or (2) evidence satisfactory to the county committee must be presented that fertilizing material sufficient to ordinarily obtain a good stand was applied in 1937 in preparation for seeding in 1938.

LIME.—Either (1) at least sufficient liming material to earn 2 units of credit under practice 14 must be applied per acre in 1938 at or before the time of seeding; or

(2) Evidence satisfactory to the county committee must be presented that sufficient liming material to ordinarily obtain a good stand was applied in 1937; or

(3) A soil test satisfactory to the county committee must be submitted which shows that the application of liming material is not needed in the case of alfalfa or that less than sufficient liming material to earn 2 units of credit under practice 14 is needed per acre in the case of other seedings.

Practice No. 4.—Seeding Pasture Mixtures: *Rate of Credit*, 2 Units per Acre

Seeding at least 6 pounds per acre of white or hardy, northern-grown domestic or Canadian (red or alsike) clover seed, or mixtures of these, and at least 6 pounds per acre of bluegrass seed in a pasture mixture containing at least 18 pounds per acre. All or part of the grass seed in excess of 6 pounds of bluegrass seed may have been sown in the fall of 1937.

Credit will not be given for this practice if either (1) such seedings are plowed or disked under for green manure or (2) the provisions of the foregoing paragraphs headed "Fertilizer" and "Lime" are not complied with.

Practice No. 5.—Reseeding: *Rate of Credit*, 1 Unit for Each 10 Pounds of Seed but Not in Excess of 1 Unit per Acre

Reseeding an established pasture with a pasture mixture containing at least one-third white or hardy, northern-grown domestic or Canadian (red or alsike) clover seed, or mixtures of these, and at least one-third bluegrass seed. Credit will not be given unless the provisions of the foregoing paragraph headed "Lime" are complied with and at least 60 pounds of available phosphoric acid are applied per acre.

Practice No. 6.—Establishing New Seedings of Alfalfa: *Rate of Credit*, 2 Units per Acre

Seeding either (1) at least 15 pounds per acre of hardy, northern-grown domestic or Canadian varieties of alfalfa seed, or (2) a mixture containing at least 8 pounds per acre of such alfalfa seed and at least 4 pounds per acre of hardy, northern-grown domestic or Canadian (red or alsike) clover seed or mixtures of these, provided, how-

ever, that the seeding shall be made on land where at least 4 pounds of grass are seeded in 1938 or were seeded in the fall of 1937.

Credit will not be given for this practice if either (1) such seedings are plowed or disked under for green manure or (2) the provisions of the foregoing paragraphs headed "Fertilizer" and "Lime" are not complied with.

Practice No. 7.—Establishing New Seedings of Clover: *Rate of Credit, 1 Unit per Acre*

Seeding either (1) 6 pounds per acre of hardy, northern-grown domestic or Canadian red or alsike clover, or mixtures of these, in a mixture containing at least 12 pounds of seed; provided, however, that all or part of the seed in excess of 6 pounds of hardy, northern-grown domestic or Canadian red or alsike clover seed or mixtures of these may have been sown in the fall of 1937, or (2) at least 12 pounds of sweet clover per acre, provided, however, that the seeding shall be made on land where at least 4 pounds of timothy are seeded in 1938 or were seeded in the fall of 1937.

Credit will not be given for this practice if either (1) such seedings are plowed or disked under for green manure or (2) the provisions of the foregoing paragraphs headed "Fertilizer" and "Lime" are not complied with.

GREEN MANURE AND COVER CROPS

Practice No. 8.—Green Manure: *Rate of Credit, 1 Unit per Acre*

Plowing or disk under a good stand and a good growth of (1) biennial or perennial legumes or grasses, for which no credit for seeding is given in 1938 and from which no crop of such legumes or grasses has ever been harvested, (2) annual legumes, (3) annual grasses, or (4) small grains. If the crop is one which is normally winter-killed, credit will be given for leaving a good stand and a good growth on the land instead of plowing or disk it under.

Practice No. 9.—Seeding Winter Legumes: *Rate of Credit, 1 Unit per Acre*

Seeding (1) at least 25 pounds per acre of winter vetch not later than September 15, 1938, or (2) at least 15 pounds per acre of crimson or sweet clover not later than August 15, 1938, and leaving the resulting crop on the land as a winter cover crop.

MULCHING

Practice No. 10.—Mulching Orchard or Vegetable Land: *Rate of Credit, 1 Unit per Ton*

Applying not less than 1 ton and not more than 5 tons per acre of air-dried straw, hay, or finely shredded corn fodder to orchard or vegetable land as a mulch if all materials produced on the land during 1938 from grasses, legumes, green manure, or cover crops are left on the land.

SOIL-EROSION CONTROL

Practice No. 11.—Stripcropping: *Rate of Credit*, One-fourth Unit per Acre

Planting cropland, having a general slope of over 5 percent, in strips approximately on the contour. Strips of intertilled crops at least 50 feet and not more than 100 feet in width must be separated by strips of close-growing crops of the same width. In general, the width of the strips should become smaller as the percentage of slope increases.

Where the advice of the Soil Conservation Service or the Agricultural Extension Service is available, they should be consulted concerning the proper way to carry out this practice.

Practice No. 12.—Contour Furrowing Noncrop, Open Pasture Land: *Rate of Credit*, One-fourth Unit per Acre

This practice shall be performed in the following manner:

- (1) Mark lines on the contour across the field to be furrowed. These lines should be spaced according to the slope of the land, one line for every 2 feet of vertical drop.
- (2) Turn double furrows (two furrows turned the same way) 50 feet long and approximately 8 inches deep on each of these lines. Between each 50-foot double furrow there must be left an unplowed space of about 6 feet. The 6-foot unplowed spaces on one line shall be left directly above the 50-foot plowed furrows on the line directly below it.

Where the advice of the Soil Conservation Service or the Agricultural Extension Service is available, they should be consulted concerning the proper way to carry out this practice.

Practice No. 13.—Terracing: *Rate of Credit*, 1 Unit for Each 200 Linear Feet

Construction of standard terrace, for which proper outlets are provided, in accordance with instructions issued by the Soil Conservation Service or the Agricultural Extension Service. Operators must obtain the approval of the county committee before performing this practice.

APPLYING LIME AND FERTILIZER

Practice No. 14.—Liming Cropland, Pasture Land, or Orchards: *Rate of Credit*, 1 Unit for Each:

- (1) 500 pounds of total calcium and magnesium oxides in
 - (a) pulverized or ground limestone, pulverized oyster shell, crushed agricultural slag, artificial carbonates of lime, or artificially dried marl which will pass through a 20-mesh sieve, or
 - (b) hydrated or ground burned lime
- (2) 2,000 pounds of marl (not artificially dried)
- (3) 2,500 pounds of water-cooled agricultural slag
- (4) 1,000 pounds of burned lump lime
- (5) Quantity of other liming materials classified and approved by the State committee with the approval of the Regional Director

Applying liming materials to cropland, pasture land, or orchards.

No credit will be given for the application of less than 750 pounds of hydrated lime per acre, 500 pounds of ground burned lime per acre, or 1,000 pounds of other liming materials per acre.

Practice No. 15.—Applying Available Phosphoric Acid: *Rate of Credit, 1 Unit per 48 Pounds*

Applying in 1938 (1) at least 36 and not more than 100 pounds of available phosphoric acid per acre to, or in connection with the seeding of, perennial or biennial legumes, perennial grasses, winter legumes, or (2) at least 60 pounds of available phosphoric acid to permanent pasture.

If phosphoric acid is applied in connection with a seeding made in a nurse crop which is harvested for grain, 32 pounds of available phosphoric acid per acre will be deducted.

Practice No. 16.—Applying Available Potash: *Rate of Credit, 1 Unit per 100 Pounds*

Applying at least 12 pounds per acre but not more than 45 pounds of available potash per acre to, or in connection with the seeding in 1938 of, perennial or biennial legumes, perennial grasses, winter legumes, or permanent pasture.

SOIL-DEPLETING CROPS

Land devoted in 1938 to any of the following crops² or uses, or such other similar crops and uses as are designated by the Agricultural Adjustment Administration, shall be classified as soil-depleting:

(a) Land planted to any of the following crops for harvest in 1938:

- (1) Corn (including field corn and popcorn, but excluding sown or close-drilled corn used as a cover crop or green manure crop)
- (2) Grain sorghums
- (3) Tobacco
- (4) Mangels and cowbeets
- (5) Cultivated sunflowers
- (6) Truck and vegetable crops (including strawberries, melons, sweet corn, and sweetpotatoes) and their seeds
- (7) Potatoes
- (8) Bulbs and flowers
- (9) Field beans
- (10) Canning peas

(b) Land from which any of the following crops is harvested for silage, hay, grain, or seed in 1938:

- | | |
|---------------|--------------------------------|
| (1) Wheat | (7) Sudan grass |
| (2) Oats | (8) Millet |
| (3) Barley | (9) Sown or close-drilled corn |
| (4) Rye | (10) Soybeans |
| (5) Buckwheat | (11) Cowpeas |
| (6) Rape | (12) Field peas |

The acreage of land which is devoted consecutively to two or more soil-depleting crops in 1938 shall be counted as follows: (1) If only one of such crops reaches maturity such land shall be regarded as devoted to the crop reaching maturity. (2) If none of such crops reaches maturity or if more than one of such crops reach maturity

² Volunteer crops, if harvested, shall classify as if planted.

and an individual acreage allotment is established for only one of such crops, such land shall be regarded as devoted to the crop for which an individual acreage allotment is established. (3) If none of such crops reaches maturity and individual acreage allotments are established for two or more of such crops, the land shall be regarded as devoted to the last planted of such crops for which an individual acreage allotment is established. (4) If two or more of such crops reach maturity and individual acreage allotments are established for two or more of such crops reaching maturity, the land shall be regarded as devoted to each of the crops which reached maturity and for which an individual acreage allotment is established.

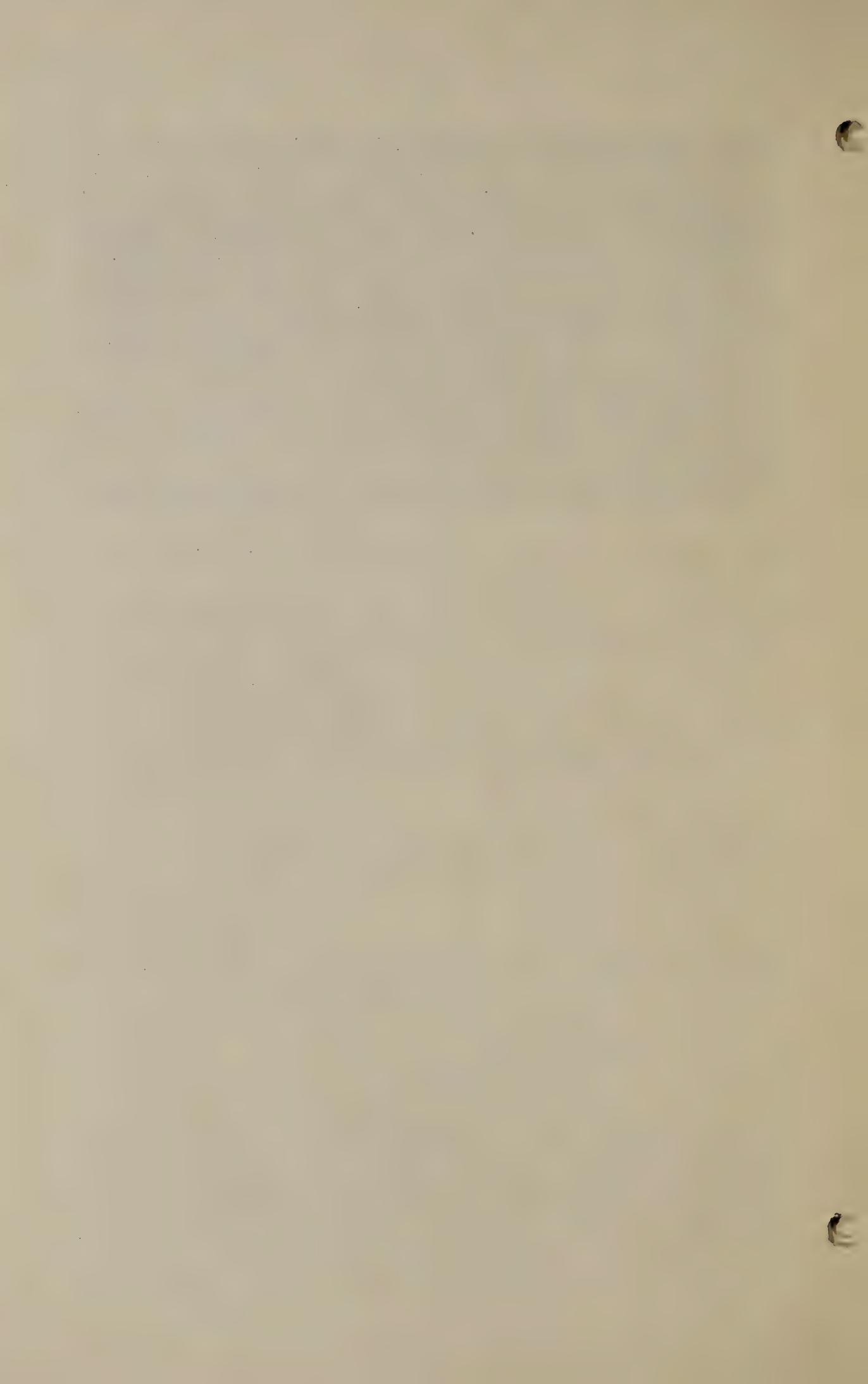
The acreage of land which is devoted simultaneously to two or more soil-depleting crops shall be divided among such crops on the basis of the land, determined in accordance with instructions issued by the Agricultural Adjustment Administration, to be occupied by each.

Issued February 10, 1938, with the approval of the Administrator.

A. W. MANCHESTER,
Director, Northeast Division.

W. S. HAGAR,
State Executive Officer.

WARREN F. WHITTIER,
J. HANSEL FRENCH,
JOHN R. PARKER,
RALPH L. WATTS,
JAMES E. WALKER,
State Committee.



BUREAU OF AGRICULTURAL ECONOMICS

U. S. DEPARTMENT OF AGRICULTURE

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL ADJUSTMENT ADMINISTRATION
NORTHEAST DIVISION

1938 Agricultural Conservation Program**Northeast Region**

SOIL-BUILDING PRACTICES APPLICABLE IN RHODE ISLAND

ESTABLISHING NEW SEEDINGS:	Page
PRACTICE No. 1. SEEDING BIENNIAL LEGUMES-----	2
PRACTICE No. 2. SEEDING ALFALFA-----	2
PRACTICE No. 3. SEEDING PERMANENT PASTURE-----	2
PRACTICE No. 4. SEEDING TIMOTHY OR REDTOP-----	2
PRACTICE No. 5. RESEEDING PASTURES-----	3
 GREEN MANURE AND COVER CROPS:	
PRACTICE No. 6. GREEN MANURE-----	3
PRACTICE No. 7. SEEDING WINTER LEGUMES-----	3
 FARM WOODLAND IMPROVEMENT:	
PRACTICE No. 8. IMPROVING WOODLANDS-----	3
PRACTICE No. 9. PLANTING FOREST TREES-----	3
PRACTICE No. 10. EXCLUDING LIVESTOCK FROM FARM WOODLAND-----	4
 SANDING CRANBERRY BOGS:	
PRACTICE No. 11. SANDING CRANBERRY BOGS-----	4
 APPLYING FERTILIZERS, SLAG, AND LIME:	
PRACTICE No. 12. APPLYING AVAILABLE PHOSPHORIC ACID-----	4
PRACTICE No. 13. APPLYING AVAILABLE POTASH-----	4
PRACTICE No. 14. APPLYING BASIC SLAG-----	4
PRACTICE No. 15. LIMING CROPLAND OR PASTURE LAND-----	5
 MULCHING:	
PRACTICE No. 16. MULCHING ORCHARD OR VEGETABLE LAND-----	5
 SOIL EROSION CONTROL:	
PRACTICE No. 17. CONTOUR FURROWING NONCROP, OPEN PASTURE LAND-----	5
PRACTICE No. 18. STRIpcROPPING-----	6
PRACTICE No. 19. CONTOUR FARMING-----	6
PRACTICE No. 20. TERRACING-----	6
 SOIL-DEPLETING CROPS-----	
	6

The following are soil-building practices which are applicable to and approved for the State of Rhode Island. For each practice carried out as specified herein on any farm, credit at the rate indicated in the description of the practice will be given toward achieving the soil-

building goal established for the farm under the 1938 Agricultural Conservation Program.

Practices carried out with labor, seed, trees, or materials furnished entirely by any State or Federal agency other than the Agricultural Adjustment Administration shall not be counted toward meeting the soil-building goal. If a portion of the labor, seed, trees, or materials used in carrying out any practice is furnished by a State or Federal agency other than the Agricultural Adjustment Administration, that portion of the total acreage of the practice commensurate with that portion of the total cost not furnished by the State or Federal agency may be counted toward meeting the soil-building goal.

ESTABLISHING NEW SEEDINGS

Practice No. 1.—Seeding Biennial Legumes: *Rate of Credit, 1 Unit per Acre*

Seeding at least 5 pounds per acre of hardy, northern-grown domestic or Canadian medium red clover or its equivalent in mixtures with grasses or other clovers. Credit will not be given for this practice if such seedings are plowed or disked under for green manure in 1938.

The following shall be considered the equivalent of 5 pounds of medium red clover:

8 pounds of white sweetclover.	4 pounds of alsike clover.
2 pounds of white Dutch clover.	2 pounds of ladino clover.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that enough lime and fertilizer were applied to ordinarily establish a good stand.

Practice No. 2.—Seeding Alfalfa: *Rate of Credit, 2 Units per Acre*

Seeding at least 10 pounds of alfalfa seed per acre.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that enough lime and fertilizer were applied to ordinarily establish a good stand.

Practice No. 3.—Seeding Permanent Pasture: *Rate of Credit, 2 Units per Acre*

Sowing a pasture mixture containing at least 5 pounds per acre of biennial or perennial legumes and at least 5 pounds per acre of perennial grasses other than timothy or redtop.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that enough lime and fertilizer were applied to ordinarily establish a good stand.

Practice No. 4.—Seeding Timothy or Redtop: *Rate of Credit, 1/2 Unit per Acre*

Sowing at least (1) 12 pounds per acre of timothy or (2) 6 pounds per acre of timothy with 3 pounds per acre of redtop. Credit will not be given for this practice if such seedings are plowed or disked under for green manure in 1938.

If the stand is unsatisfactory, a soil test or other evidence satisfactory to the county committee must be submitted to show that enough lime and fertilizer were applied to ordinarily establish a good stand.

Practice No. 5.—Reseeding Pastures: *Rate of Credit, 1 Unit per Each 10 Pounds of Seed but Not in Excess of 1 Unit per Acre*

Seeding a pasture mixture containing at least one-third ladino or white Dutch clover seed and at least one-third perennial grass seed. No tillage is required.

GREEN MANURE AND COVER CROPS

Practice No. 6.—Green Manure: *Rate of Credit, 1 Unit per Acre*

Plowing or disking under a good stand and a good growth of (1) biennial or perennial legumes or grasses for which no credit for seeding is given in 1938 and from which no crop of such legumes or grasses has been harvested, (2) annual legumes, (3) annual grasses, or (4) small grains. If the crop is one which is normally winter-killed, credit will be given for leaving a good stand and a good growth on the land instead of plowing or disking it under.

It is not generally good farm practice to plow down green-manure crops if it will result in leaving the land unprotected during the winter. It is recommended, therefore, that crops which are normally winter-killed and which otherwise might be considered as green-manure crops for 1938 be left on the land as a winter cover wherever it is possible.

Practice No. 7.—Seeding Winter Legumes: *Rate of Credit, 1 Unit per Acre*

Seeding and leaving a good growth of winter vetch or Austrian field peas on the land as a winter cover crop.

FARM WOODLAND IMPROVEMENT

Practice No. 8.—Improving Woodlands: *Rate of Credit, 2 Units per Acre*

Improving the stand of forest trees by thinning, weeding, or pruning to develop at least 100 potential timber trees of desirable species, well distributed over each acre of woodland improved.

Operators shall obtain prior approval from the county committee and carry out the practice in accordance with the recommendations of the State or extension forester.

The following are recommended as desirable species for development:

Red pine	White maple	Beech
White pine	Red maple	White ash
Norway spruce	Hemlock	Red oak
White spruce	Tulip poplar	White oak
Red spruce	White birch	Basswood
Balsam fir	Yellow birch	Hickory
Sugar maple	Black birch	Elm

Practice No. 9.—Planting Forest Trees: *Rate of Credit, 5 Units per Acre*

Planting transplanted forest trees at the rate of at least 1,000 trees per acre spaced approximately 6 by 6 feet.

Species of trees approved for planting are those listed under Practice No. 8. Other varieties may be planted if the county committee, upon advice of the State forester, approves the selection.

Practice No. 10.—Excluding Livestock From Farm Woodland: *Rate of Credit, $\frac{1}{4}$ Unit per Acre*

Restoring farm woodland previously used for pasture by excluding livestock.

Credit will be allowed for each acre of woodland from which livestock are excluded, but not in excess of 2 acres for each animal unit¹ which is normally allowed to graze in the woodland.

The operator must obtain the approval of the county committee before performing this practice.

SANDING CRANBERRY BOGS

Practice No. 11.—Sanding Cranberry Bogs: *Rate of Credit, 5 Units per Acre*

Applying sand free from stones or loam to a depth of at least one-half inch on fruiting cranberry bogs to prevent soil deterioration and decline in the productive capacity of the land.

The county committee will require evidence as to the number of cubic yards of sand applied per acre.

APPLYING FERTILIZERS, SLAG, AND LIME

Practice No. 12.—Applying Available Phosphoric Acid: *Rate of Credit, 1 Unit per Each 48 Pounds*

Applying available phosphoric acid to or in connection with the seeding of perennial or biennial legumes, perennial grasses, winter legumes, or permanent pastures.

	<i>Pounds per acre</i>
Smallest application for credit-----	32
Largest application for credit-----	96

Phosphoric acid used under the program as specified in the first paragraph of this practice may first be incorporated with stable manure and used on dropping boards in poultry houses.

If phosphoric acid is used on a nurse crop which is harvested for grain, 32 pounds per acre will be deducted.

Practice No. 13.—Applying Available Potash: *Rate of Credit, 1 Unit per Each 100 Pounds*

Applying available potash to or in connection with the seeding of perennial or biennial legumes, perennial grasses, winter legumes, or permanent pastures.

	<i>Pounds per acre</i>
Smallest application for credit-----	25
Largest application for credit-----	100

Practice No. 14.—Applying Basic Slag: *Rate of Credit, 1 Unit per Each 500 Pounds*

Applying basic slag to or in connection with the seeding of perennial or biennial legumes, perennial grasses, winter legumes, or permanent pastures.

¹ Animal unit means 1 cow, 1 horse, 5 sheep, 5 goats, 2 calves, or 2 colts, or the equivalent thereof.

Practice No. 15.—Liming Cropland or Pasture Land: Rate of Credit,

1 unit for each (1) 800 pounds of standard ground limestone or standard ground oystershell, or (2) 600 pounds of hydrated lime.

1 unit for each 400 pounds of calcium oxide neutralizing equivalent in ground limestone (other than standard) or ground oystershell (other than standard) which will pass through a 20-mesh sieve.

Applying not less than 1,000 and not more than 4,000 pounds of standard ground limestone or its equivalent per acre to cropland or pasture land.

Standard ground limestone or standard ground oystershell are limestone or oystershell which will analyze at least 50 percent total magnesium and calcium oxides, 100 percent of which will pass through a 20-mesh sieve and at least 60 percent of which will pass through a 100-mesh sieve.

The equivalent of 1,000 pounds of standard ground limestone is 750 pounds of hydrated lime.

The following table gives the smallest and largest amounts of ground limestone or ground oystershell of different degrees of fineness which can be applied per acre for credit:

Percentage of material which will pass through a 100-mesh sieve	Smallest number of pounds of material per acre	Largest number of pounds of material per acre
60 and over	1,000	4,000
50 to 60	1,250	5,000
40 to 50	1,500	6,000
30 to 40	2,000	8,000
20 to 30	2,500	10,000
10 to 20	3,000	12,000

Equivalent quantities of other liming material approved by the State committee may be used.

MULCHING**Practice No. 16.—Mulching Orchard or Vegetable Land: Rate of Credit, 1 Unit per Ton**

Applying not less than 1 ton and not more than 5 tons per acre of air-dried straw or hay to orchard or vegetable land as a mulch if all materials produced on the land during 1938 from grasses, legumes, green manure crops, or cover crops are left on the land.

Cotton waste and wool waste may be used, but credit will be given for only 50 percent of the weight.

SOIL EROSION CONTROL**Practice No. 17.—Contour Furrowing Noncrop, Open Pasture Land: Rate of Credit, 1/4 Unit per Acre**

Contour furrowing noncrop, open pasture land which has a general slope of 5 percent or greater.

This practice must be carried out in accordance with plans recommended by the Soil Conservation Service and approved in advance by the county committee.

Practice No. 18.—Stripcropping: Rate of Credit, 1/4 Unit per Acre

Stripcropping land with a slope of 5 percent or greater.

This practice must be carried out in accordance with plans recommended by the Soil Conservation Service and approved in advance by the county committee.

Practice No. 19.—Contour Farming: Rate of Credit, 1/6 Unit per Acre

Cultivating intertilled crops on the contour.

This practice must be carried out in accordance with plans recommended by the Soil Conservation Service and approved in advance by the county committee.

Practice No. 20.—Terracing: Rate of Credit, 1 Unit per Each 200 Linear Feet

Construction of standard terrace for which proper outlets are provided.

This practice must be carried out in accordance with plans recommended by the Soil Conservation Service and approved in advance by the county committee.

SOIL-DEPLETING CROPS

Land devoted in 1938 to any of the following crops² or uses, or such other similar crops and uses as are designated by the Agricultural Adjustment Administration, shall be classified as soil-depleting:

(a) Land planted to any of the following crops for harvest in 1938:

- (1) Corn (including field corn and popcorn, but excluding sown or close-drilled corn used as a cover crop or green-manure crop).
- (2) Grain sorghums.
- (3) Mangels and cowbeets.
- (4) Cultivated sunflowers.
- (5) Truck and vegetable crops (including strawberries, melons, sweet corn, and sweetpotatoes) and their seeds.
- (6) Potatoes.
- (7) Bulbs and flowers.
- (8) Field beans.
- (9) Canning peas.

(b) Land from which any of the following crops is harvested for silage, hay, grain, or seed, in 1938:

- | | |
|----------------|---------------------------------|
| (1) Wheat. | (7) Sudan grass. |
| (2) Oats. | (8) Millet. |
| (3) Barley. | (9) Sown or close-drilled corn. |
| (4) Rye. | (10) Soybeans. |
| (5) Buckwheat. | (11) Cowpeas. |
| (6) Rape. | (12) Field peas. |

The acreage of land which is devoted consecutively to two or more soil-depleting crops in 1938 shall be counted as follows: (1) If only one of such crops reaches maturity, such land shall be regarded as devoted to the crop reaching maturity; and (2) if none of such crops reaches maturity or if more than one of such crops reach maturity and one of such crops is potatoes, such land shall be regarded as devoted to potatoes.

² Volunteer crops, if harvested, shall classify as if planted.

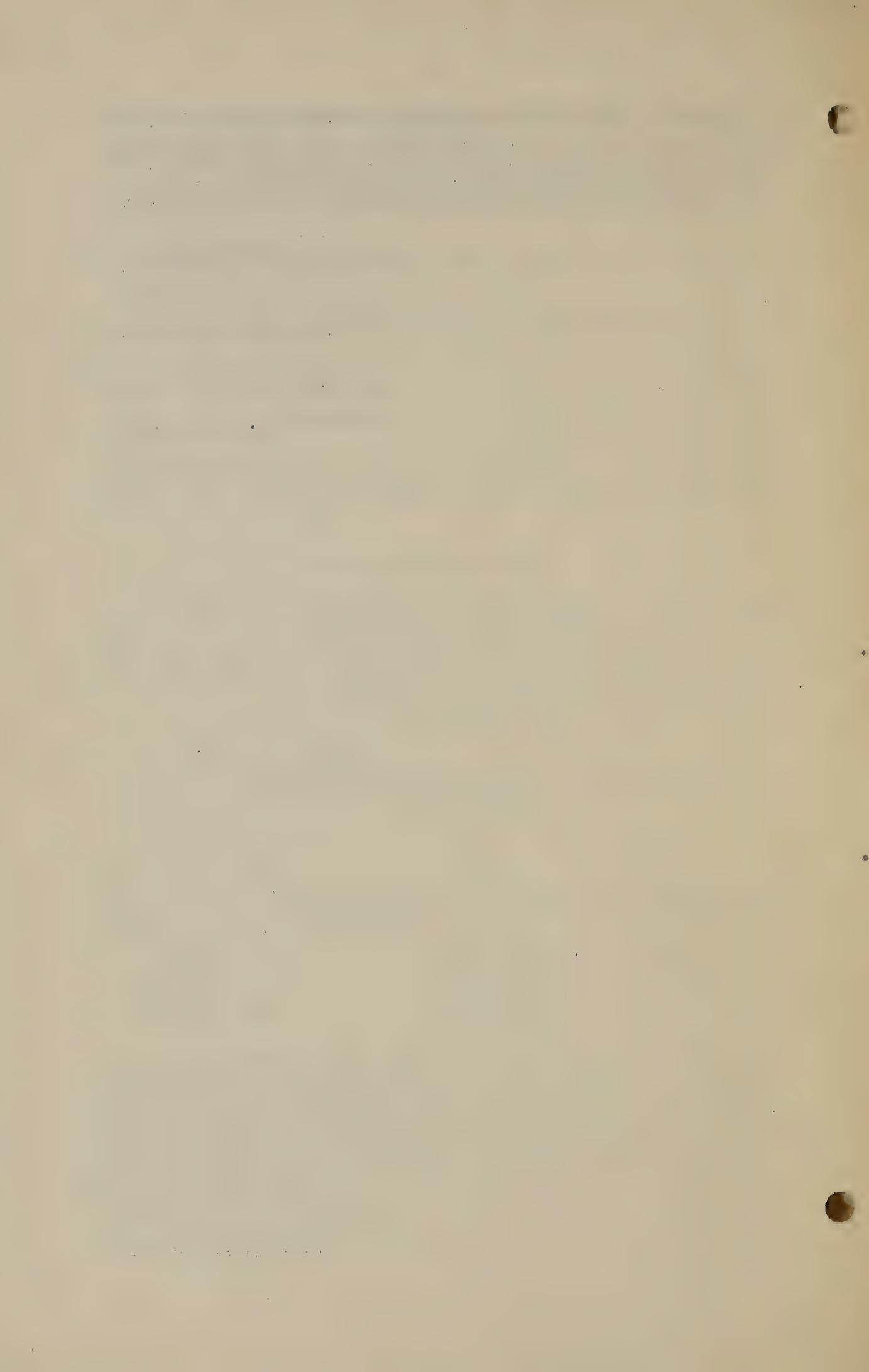
The acreage of land which is devoted simultaneously to two or more soil-depleting crops shall be divided among such crops on the basis of the land determined, in accordance with instructions issued by the Agricultural Adjustment Administration, to be occupied by each.

Issued January 6, 1938, with the approval of the Administrator.

A. W. MANCHESTER,
Director, Northeast Division.

RALPH S. SHAW,
State Executive Officer.

HENRY H. BARTON,
E. WARD MASON,
JACOB MENZI,
State Committee.



LIBRARY
AGRICULTURAL ADJUSTMENT ADMINISTRATION
NORTHEAST DIVISION

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL ADJUSTMENT ADMINISTRATION
NORTHEAST DIVISION

1938 Agricultural Conservation Program

Northeast Region

SOIL-BUILDING PRACTICES APPLICABLE IN VERMONT

	Page
APPLYING LIME AND FERTILIZERS:	
Practice No. 1. LIMING CROPLAND AND PASTURE LAND---	2
Practice No. 2. APPLYING AVAILABLE PHOSPHORIC ACID--	3
Practice No. 3. APPLYING AVAILABLE POTASH-----	3
ESTABLISHING NEW SEEDINGS:	
Practice No. 4. SEEDING BIENNIAL LEGUMES-----	4
Practice No. 5. SEEDING ALFALFA-----	5
Practice No. 6. SEEDING PASTURE MIXTURES-----	5
GREEN MANURE AND COVER CROPS:	
Practice No. 7. GREEN MANURE-----	5
Practice No. 8. SEEDING WINTER LEGUMES-----	6
MULCHING:	
Practice No. 9. MULCHING ORCHARD OR VEGETABLE LAND.	6
FARM WOODLAND IMPROVEMENT:	
Practice No. 10. PLANTING FOREST TREES-----	6
Practice No. 11. IMPROVING WOODLANDS-----	7
Practice No. 12. EXCLUDING LIVESTOCK FROM FARM WOOD- LAND-----	7
SOIL-DEPLETING CROPS -----	7

The following are soil-building practices which are applicable to and approved for the State of Vermont. For each practice carried out as specified herein on any farm credit at the rate indicated in the description of the practice will be given toward achieving the soil-building goal established for the farm under the 1938 Agricultural Conservation Program.

Practices carried out with labor, seed, trees, or materials furnished entirely by any State or Federal agency other than the Agricultural Adjustment Administration shall not be counted toward meeting the soil-building goal. If a portion of the labor, seed, trees, or materials used in carrying out any practice is furnished by a State or Federal agency other than the Agricultural Adjustment Administration, that portion of the total acreage of the practice commensurate with that portion of the total cost not furnished by the State or Federal agency may be counted toward meeting the soil-building goal.

APPLYING LIME AND FERTILIZERS

Practice No. 1.—Liming Cropland and Pasture Land:—*Rate of Credit:*

Area A—Bennington, Caledonia, Essex, Grand Isle, Lamoille, Orange, Orleans, and Washington Counties.

- 1 unit for each 800 pounds of standard ground limestone¹
- 1 unit for each 400 pounds of total calcium and magnesium oxides (1) in ground limestone (other than standard) which will pass through a 20-mesh sieve or (2) in other liming materials

Area B—All other counties.

- 1 unit for each 1,000 pounds of standard ground limestone¹
- 1 unit for each 500 pounds of total calcium and magnesium oxides (1) in ground limestone (other than standard) which will pass through a 20-mesh sieve or (2) in other liming materials

Applying at least 1,000 pounds of standard ground limestone¹ or at least 500 pounds of total calcium and magnesium oxides in ground limestone (other than standard) which will pass through a 20-mesh sieve or in other liming materials to cropland or pasture land.

If any material other than standard ground limestone is used, the operator must submit evidence satisfactory to the county committee as to the total oxide content and, in the case of ground limestone other than standard, the percentage of the material which will pass through a 20-mesh sieve.

Lime should be applied to cropland or pasture land according to the need as determined by soil tests. However, if soil tests are not available, credit will be given only if sufficient lime to conform with good farming practice for the farm is applied.

The following table gives the amounts of standard ground limestone generally recommended for different crops on soils of varying acidity:

ON CLAY LOAM, SILT LOAM, OR LOAM

Reaction	pH	Alfalfa	Clover and grasses	Top-dressing pasture
		Pounds per acre	Pounds per acre	Pounds per acre
Neutral-----	7.0	0	0	0
Slightly acid-----	6.5	0	0	0
Moderately acid-----	6.0	2,000	1,500	1,000
Medium acid-----	5.5	3,000	2,000	1,500
Strongly acid-----	5.0	4,000	3,000	2,000
Very strongly acid-----	4.5	6,000	4,000	2,000

ON SANDS OR SANDY LOAM

Neutral-----	7.0	0	0	0
Slightly acid-----	6.5	1,000	0	0
Moderately acid-----	6.0	1,000	1,000	1,000
Medium acid-----	5.5	2,000	1,000	1,000
Strongly acid-----	5.0	3,000	2,000	1,500
Very strongly acid-----	4.5	4,000	3,500	2,000

¹ Standard ground limestone is limestone which will analyze at least 50 percent total magnesium and calcium oxides, 100 percent of which will pass through a 20-mesh sieve and at least 60 percent of which will pass through a 100-mesh sieve.

Practice No. 2.—Applying Available Phosphoric Acid: Rate of Credit, 1 Unit per Each 48 Pounds

Applying at least 48 pounds of available phosphoric acid (300 pounds of 16 percent superphosphate) per acre, alone, or at least 24 pounds per acre in combination with other fertilizing material, as a top-dressing on or in preparation for seeding perennial or biennial legumes or perennial grasses.

Phosphoric acid may be used as a preservative on farm manures that are to be used on established sod or in connection with the seeding of biennial or perennial legumes or perennial grasses if at least 1 pound of 16 or 20 percent superphosphate per mature cow or other animal unit² is used each day.

When phosphoric acid is used on a nurse crop which is harvested for grain, 32 pounds per acre will be deducted.

The following table gives the amounts of phosphoric acid generally recommended as top-dressing on or in preparation for seeding various crops on different types of soils:

Crop	On clay loam, silt loam, loam, sands, or sandy loam	
	Phosphoric acid	16% super-phosphate
	Pounds per acre	Pounds per acre
Alfalfa	80	500
Clover and timothy	64	400
Permanent pasture (top-dressing)	96	600
Permanent pasture (seeding-down)	64	400

Practice No. 3.—Applying Available Potash: Rate of Credit, 100 Pounds per Unit

Applying at least 50 pounds of available potash (100 pounds of 50 percent muriate of potash) per acre, alone, or at least 18 pounds per acre in combination with other fertilizing material as a top-dressing on or in preparation for seeding perennial or biennial legumes or perennial grasses.

The following table gives the amounts of available potash generally recommended as top-dressing on or in preparation for seeding various crops on different types of soils:

Crop	On clay loam, silt loam, or loam		On sands or sandy loam	
	Available potash	50% potash fertilizer	Available potash	50% potash fertilizer
	Pounds per acre	Pounds per acre	Pounds per acre	Pounds per acre
Alfalfa	75	150	100	200
Clover and timothy	50	100	75	150
Permanent pasture (top-dressing)	75	150	100	200
Permanent pasture (seeding-down)	75	150	100	200

² Other animal unit: 1 horse, 5 sheep, 2 calves, 2 colts, or 100 hens.

The following table gives the amounts per acre and analysis generally recommended when phosphoric acid and potash are applied in combination or in complete fertilizer as a top-dressing on or in preparation for seeding hay or permanent pasture on different types of soil:

ON CLAY LOAM, SILT LOAM, OR LOAM

Crop	Complete fertilizer <i>Pounds per acre</i>	Percent of phosphoric acid	Percent of potash
Hay-----	300-400	8-20	6-10
Permanent pasture-----	400-500	8-20	6-10

ON SANDS OR SANDY LOAM

Hay-----	400-500	8-20	10-20
Permanent pasture-----	500-525	8-20	10-20

If the fertilizer is applied to a nurse crop which is harvested for grain, the deduction referred to for phosphoric acid will be made.

ESTABLISHING NEW SEEDINGS

Practice No. 4.—Seeding Biennial Legumes: *Rate of Credit, 1 Unit per Acre*

Seeding at least 5 pounds per acre of hardy, northern-grown domestic or Canadian medium red clover seed or an equivalent³ amount of other legume seed alone or in mixtures containing timothy or redtop on land supplied with sufficient lime and fertilizer to obtain a good stand.

If the land is not naturally supplied with sufficient lime, the amount indicated by a soil test should be applied at least 6 months in advance of seeding.

The following seeding mixtures are recommended:

HAYLAND

	<i>Pounds</i>		<i>Pounds</i>
Well-drained soils, not uniform in fertility and type:		Soils not well-drained:	
Red clover-----	6	Timothy-----	8
Timothy-----	10	Red clover-----	5
Alsike clover-----	2	Alsike clover-----	3
Total-----	18	Redtop-----	2
or		Total-----	18
Alfalfa-----	8	Wet soils:	
Red clover-----	4	Alsike clover-----	6
Timothy-----	7	Timothy-----	10
Total-----	19	Redtop-----	2
		Total-----	18

³ The following are the equivalents of 1 pound of medium red clover:
 $\frac{1}{2}$ pound alsike clover.
 $\frac{1}{3}$ pound white Dutch clover.
 $\frac{1}{4}$ pound ladino clover.
1 pound alfalfa.

PASTURE

	Pounds
Moist lowlands:	
Timothy-----	4
Redtop-----	8
Alsike clover-----	4
Total-----	16

Practice No. 5.—Seeding Alfalfa: *Rate of Credit, 2 Units per Acre*

Seeding at least 10 pounds per acre of hardy, northern-grown domestic or Canadian alfalfa seed (such as Grimm, Ontario Variegated, Hardigan or Cossack) on land prepared for the seeding by the application of sufficient lime and fertilizer to obtain a good stand.

If the land is not naturally supplied with sufficient lime, the amount indicated by a soil test should be applied at least 6 months in advance of seeding.

The following seedings per acre are recommended as being generally desirable:

1. Alfalfa alone, 10 to 15 pounds.
2. 16 to 21 pounds of a mixture containing 10 to 15 pounds of alfalfa.
3. 18 to 27 pounds of a mixture containing 10 to 15 pounds of alfalfa and 4 to 6 pounds of red clover.

Practice No. 6.—Seeding Pasture Mixtures: *Rate of Credit, 2 Units per Acre*

Seeding any of the following pasture mixtures on land prepared for the seeding by the application of sufficient lime and fertilizer to obtain a good stand:

20 pounds per acre of a mixture containing at least the following amounts of the following seeds:

	Pounds		Pounds
For fertile, well-drained soils:		For less fertile but well-drained soils:	
Kentucky bluegrass-----	5	Kentucky or Canadian bluegrass-----	5
Orchard grass-----	4	Orchard grass-----	8
White clover-----	1	Alsike clover-----	2
Alsike clover-----	2	White clover-----	1
Red clover-----	2		

12 pounds per acre of a mixture containing at least the following amounts of the following seeds:

	Pounds
For very moist lowlands:	
Reed canary grass-----	6
Alsike clover-----	1

If the land is not naturally supplied with sufficient lime, the amount indicated by a soil test should be applied at least 6 months in advance of seeding.

GREEN MANURE AND COVER CROPS

Practice No. 7.—Green Manure: *Rate of Credit, 1 Unit per Acre*

Plowing or disk ing under a good stand and a good growth of (1) biennial or perennial legumes or grasses, for which no credit for seeding is given in 1938 and from which no crop of such legumes or grasses has been harvested, (2) annual legumes, (3) annual grasses, or (4) small grains. If the crop is one which is normally winter-killed, credit will

be given for leaving a good stand and a good growth of any such crop on the land instead of plowing or disking it under.

If on land normally devoted to the production of potatoes a good stand and a good growth of first-crop of second-year clover is cut and left on the land and a good stand and a good growth of second-crop is plowed or disked under, credit will be given for the use of each crop as green manure.

The following crops and mixtures are recommended for use as green-manure crops:

Crimson clover (annual)-----	15 pounds per acre.
Soybeans (annual)-----	60-90 pounds per acre.
Sweet clover (biennial)-----	15-20 pounds per acre.
Mixtures containing legumes as given for hay under practice 4.	
Buckwheat-----	1 bushel per acre.
Oats-----	2-2½ bushels per acre.
Rye-----	1½-2 bushels per acre.
Millet-----	30-50 pounds per acre.
Barley-----	1½-2 bushels per acre.
Oats and barley-----	1 bushel each per acre.

Practice No. 8.—Seeding Winter Legumes: *Rate of Credit, 1 Unit per Acre*

Seeding at least 25 pounds per acre of winter vetch alone or in mixtures not later than September 15, 1938, and leaving the resulting crop on the land as a winter cover crop.

MULCHING

Practice No. 9.—Mulching Orchard or Vegetable Land: *Rate of Credit, 1 Unit per Ton*

Applying to orchards or vegetable land not less than 1 ton and not more than 5 tons per acre of air-dried hay, leaves, wood sawdust, wood shavings, or other mulching material approved by the county committee, in addition to leaving on the land all materials produced thereon from grasses, legumes, green manure, or cover crops.

The ordinary farm manure is not considered mulching material because the organic matter it contains breaks down so quickly that it acts as a fertilizer rather than a mulch. If a material contains 50 percent or more by volume of straw, hay, wood sawdust, wood shavings, or leaves, it shall be considered mulching to the extent of the air-dry weight of the straw or other materials, providing that the material is applied in such a way that a mulch is established.

The following is the approximate cubic feet per ton of some mulching materials:

Material:	Approximate cubic feet per ton air-dry	Material:	Approximate cubic feet per ton air-dry
Straw-----	650	Wood shavings-----	340
Mixed hay-----	620	Wood sawdust-----	175

FARM WOODLAND IMPROVEMENT

Practice No. 10.—Planting Forest Trees: *Rate of Credit, 5 Units per Acre*

Planting transplanted forest trees at the rate of at least 1,000 trees per acre.

Plantings must be protected from damage due to livestock grazing. When white pine plantings are made, currant and gooseberry bushes within 1,000 feet of the planting site should be removed.

The following varieties of trees are recommended for planting on the type of soil indicated:

ON WELL-DRAINED LOAMS

Softwood:	Softwood—Cont'd.:	Hardwood:
Northern white pine.	European larch.	White ash:
Red pine.	Norway spruce.	Sugar maple.
Red spruce.	White spruce.	Basswood.
		Black locust.

ON VERY LIGHT SAND OR GRAVELLY SOILS

Softwood:	Red pine.	Scotch pine.
Northern white pine.		

ON AREAS OF EXCESS MOISTURE

Softwood:	Hardwood:
White cedar.	Black ash.
Balsam.	American elm.
Eastern hemlock.	

Practice No. 11.—Improving Woodlands: *Rate of Credit, 2 Units per Acre*

With prior approval of the county committee, improving the stand of forest trees by thinning, weeding, or pruning to develop at least 100 potential timber trees of desirable species well distributed over each acre of woodland improved.

Credit will not be given for weeding and thinning on the same acreage of woodland.

If pruning is one of the practices used, it should be confined to pine or spruce not over 6 inches in diameter and must be done with a saw or pruning shears after the area has been properly thinned.

Practice No. 12.—Excluding Livestock from Farm Woodland: *Rate of Credit, One-fourth Unit per Acre*

Restoring farm woodland previously used for pasture by excluding livestock.

Credit will be allowed for each acre of maple-sugar orchard from which livestock are excluded.

Credit will also be allowed for each acre of other farm woodland from which livestock are excluded, but not in excess of two acres for each animal unit⁴ which is normally allowed to graze in the woodland.

The operator must obtain approval of the county committee before performing this practice.

SOIL-DEPLETING CROPS

Land devoted in 1938 to any of the following crops⁵ or uses, or such other similar crops and uses as are designated by the Agricultural Adjustment Administration, shall be classified as soil-depleting:

⁴ Animal unit means 1 cow, 1 horse, 5 sheep, 5 goats, 2 calves, or 2 colts, or the equivalent thereof.

⁵ Volunteer crops, if harvested, shall classify as if planted.

- (a) Land planted to any of the following crops for harvest in 1938:
1. Corn (including field corn and popcorn, but excluding sown or close-drilled corn used as a cover crop or green-manure crop)
 2. Grain sorghums
 3. Mangels and cowbeets
 4. Cultivated sunflowers
 5. Truck and vegetable crops (including strawberries, melons, sweet corn, and sweetpotatoes) and their seeds
 6. Potatoes
 7. Bulbs and flowers
 8. Field beans
 9. Canning peas
 10. Tobacco
- (b) Land from which any of the following crops is harvested for silage, hay, grain, or seed in 1938:
- | | |
|--------------|-------------------------------|
| 1. Wheat | 7. Sudan grass |
| 2. Oats | 8. Millet |
| 3. Barley | 9. Sown or close-drilled corn |
| 4. Rye | 10. Soybeans |
| 5. Buckwheat | 11. Cowpeas |
| 6. Rape | 12. Field peas |

The acreage of land which is devoted consecutively to two or more soil-depleting crops in 1938 shall be counted as follows: (1) If only one of such crops reaches maturity such land shall be regarded as devoted to the crop reaching maturity. (2) If none of such crops reaches maturity or if more than one of such crops reach maturity and an individual crop goal is established for only one of such crops, such land shall be regarded as devoted to the crop for which an individual crop goal is established. (3) If none of such crops reaches maturity and individual crop goals are established for two or more of such crops, the land shall be regarded as devoted to the last planted of such crops for which an individual crop goal is established. (4) If two or more of such crops reach maturity and individual crop goals are established for two or more of such crops reaching maturity, the land shall be regarded as devoted to each of the crops which reached maturity and for which an individual crop goal is established.

The acreage of land which is devoted simultaneously to two or more soil-depleting crops shall be divided among such crops on the basis of the land determined, in accordance with instructions issued by the Agricultural Adjustment Administration, to be occupied by each.

Issued January 15, 1938, with the approval of the Administrator.

A. W. MANCHESTER,
Director, Northeast Division.

H. W. SOULE,
State Executive Officer.

EDW. H. JONES,
E. FRANK BRANON,
GEORGE D. BAILEY,
ARTHUR H. PACKARD,
W. F. SINCLAIR,
State Committee.